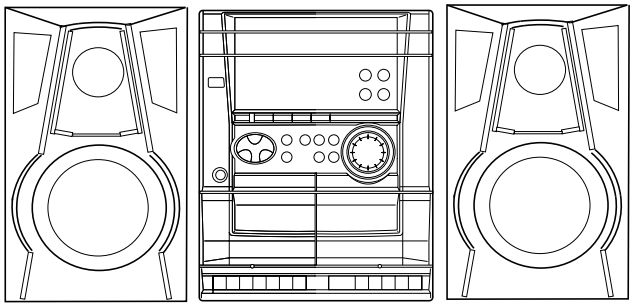
aiwa
SERVICE

NSX-SZ10 EZ K HR
NSX-SZ11 LH
NSX-SZ12 EZ
NSX-SZ17 EZ



SERVICE MANUAL

COMPACT DISC
STEREO SYSTEM

BASIC TAPE MECHANISM : ZZM-2 PR1NM(10/12/17)
BASIC TAPE MECHANISM : ZZM-2 YPR1NM(11)
BASIC CD MECHANISM : AZG-1 ZA3RNDM(10/12/17)
BASIC CD MECHANISM : AZG-1 YZA3RNDM(11)

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
NSX–SZ10(EZ/K)	CX–NSZ10	SX–NSZ10	RC–ZAS02
NSX–SZ10(HR)	CX–NSZ10	SX–NSZ12	
NSX–SZ11(LH)	CX–NSZ11	SX–NSZ15	
NSX–SZ12(EZ)	CX–NSZ12	SX–NSZ12	
NSX–SZ17(EZ)	CX–NSZ17	SX–NSZ10	RC–ZAS17

• If requiring information about the CD mechanism, see Service Manual of AZG-1, (S/M Code No. 09-001-335-3NC).

aiwa

S/M Code No. 09-003-424-8R2

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SPECIFICATIONS

K, EZ MODELS

Main unit CX-NSZ10/CX-NSZ12/CX-NSZ17

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	16.8 dBf
Antenna terminals	75 ohms (unbalanced)

MW tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

LW tuner section

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

Amplifier section

Power output	Rated: 12 W + 12 W (6 ohms, T.H.D. 1%, 1 kHz/DIN 45500) Reference: 15 W + 15 W (6 ohms, T.H.D. 10%, 1 kHz/DIN 45324) DIN MUSIC POWER: 30 W + 30 W
Total harmonic distortion	0.1% (6 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 500 mV
Outputs	SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 8000 Hz
Recording system	AC bias
Heads	Deck 1: Recording/playback head × 1, erase head × 1 Deck 2: Playback head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05% (1 kHz, 0 dB)

General

Power requirements	230 V AC, 50 Hz
Power consumption	45 W
Power consumption in standby mode	14 W with power-economizing mode off 0.9 W with power-economizing mode on
Dimensions (W × H × D)	260 × 324 × 346 mm
Weight	4.9 kg

Speaker system SX-NSZ10/CX-NSZ12

Speaker system	2 way, bass reflex (magnetic shielded type)
Speaker units	Woofer: 120 mm cone type Tweeter: 20 mm ceramic type
Impedance	6 ohms
Sensitivity	87 dB/W/m
Dimensions (W × H × D)	220 × 324 × 204 mm
Weight	2.0 kg

- Design and specifications are subject to change without notice.

HR MODEL

Main unit CX-NSZ10

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

MW tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

SW tuner section

Tuning range	5.730 MHz to 17.900 MHz
Usable sensitivity	40 µV (IEC)
Antenna	Wire antenna

Amplifier section

Power output	Rated: 17 W+ 17 W (6 ohms, T.H.D. 1 %, 1 kHz) Reference: 20 W + 20 W (6 ohms, T.H.D. 10 %, 1kHz)
Total harmonic distortion	0.1 % (8 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 500 mV MIC: 1.8 mV (10 kohms)
Outputs	SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 8000 Hz
Recording system	AC bias
Heads	Deck 1: Recording/playback head × 1, erase head × 1 Deck 2: Playback head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)

General

Power requirements	120 V/ 220V–230V/ 240 V AC, switchable 50/60 Hz
Power consumption	60 W
Power consumption in standby mode	14 W with power-economizing mode off 0.9 W with power-economizing mode on
Dimensions (W × H × D)	260 × 324 × 346 mm
Weight	5.0 kg

Speaker system SX-NSZ12

Speaker system	2 way, bass reflex (magnetic shielded type)
Speaker units	Woofer: 120 mm cone type Tweeter: 20 mm ceramic type
Impedance	6 ohms
Sensitivity	87 dB/W/m
Dimensions (W × H × D)	220 × 324 × 204 mm
Weight	2.0 kg

- Design and specifications are subject to change without notice.

LH MODEL

<FM tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	13.2 dBf
Antenna terminals	75 ohms (unbalanced)

<AM tuner section>

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

<Amplifier section>

Power output	Rated 28 W + 28 W (1 kHz, T.H.D. 1 %, 6 ohms) Reference 35 W + 35 W (1 kHz, T.H.D. 10 %, 6 ohms)
Total harmonic distortion	0.1 % (14 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 500 mV
Outputs	SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 8000 Hz
Recording system	AC bias
Heads	Deck 1 : Recording/playback head x 1, erase head x 1 Deck 2 : Playback head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ =780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)

<Speaker system SX-NSZ15>

Speaker System	2 way, bass reflex (magnetic shielded type)
Speaker units	Woofer: 120 mm cone type Tweeter: 20mm ceramic type
Impedance	6 ohms
Sensitivity	86 dB/W/m
Dimensions (W x H x D)	220 x 324 x 204 mm
Weight	2.0 kg

<General>

Power requirements	120 V/220-230 V/240 V AC (switchable), 50/60 Hz
Power consumption	55 W
Power consumption in standby mode	With power-economizing mode off : 12 W With power-economizing mode on : 0.9 W
Dimensions of main unit (W x H x D)	260 x 324 x 346 mm
Weight of main unit	5.7 kg

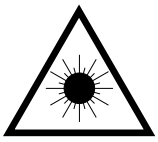
- Design and specifications are subject to change without notice.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

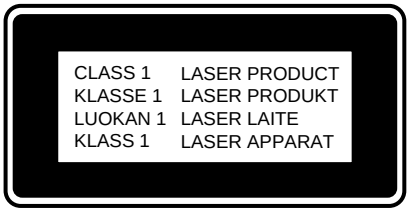
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

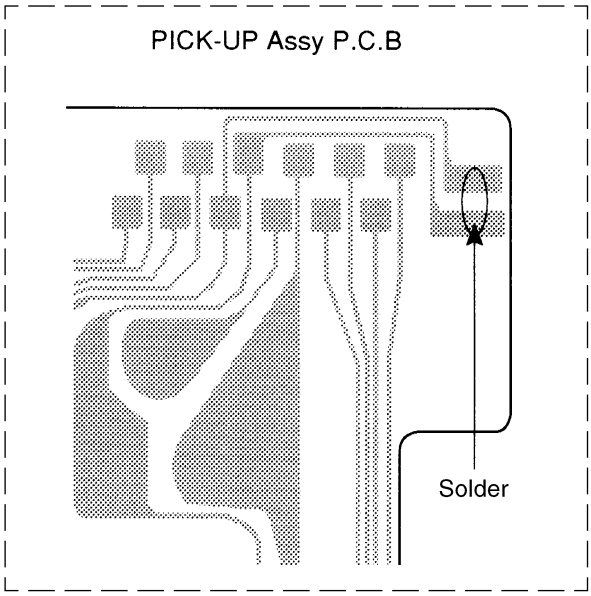


Precaution to replace Optical block

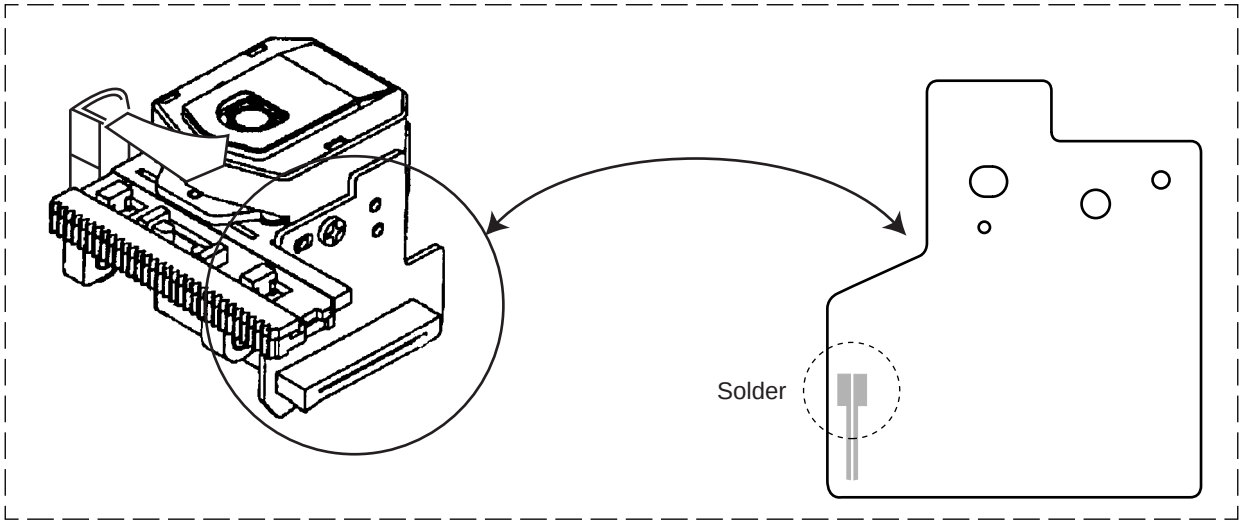
Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the figure below.

ZA3/ZA4 MODEL (KSS-213F)



ZA8 MODEL



NOTE ON BEFORE STARTING REPAIR

1. Forced discharge of electrolytic capacitor of power supply block

When repair is going to be attempted in the set that uses relay circuit in the power supply block, electric potential is kept charged across the electrolytic capacitors (C101, 102) even though AC power cord is removed. If repair is attempted in this condition, secondary defect can occur.
In order to prevent the secondary trouble, perform the following measures before starting repair work.

Discharge procedure

① Remove the AC power cord.
② Connect a discharging resistor at an end of lead wire that has clips at both ends. Connect the other end of the lead wire to metal chassis.
③ Contact the other end of the discharging resistor to the positive (+) side (+VH) of C101. (For two seconds)
④ Contact the same end of the discharging resistor as step ③ to the negative (-) side (-VH) of C102 in the same way. (For two seconds)
⑤ Check that voltage across C101 and C102 has decreased to 1 V or less using a multimeter or an oscilloscope.

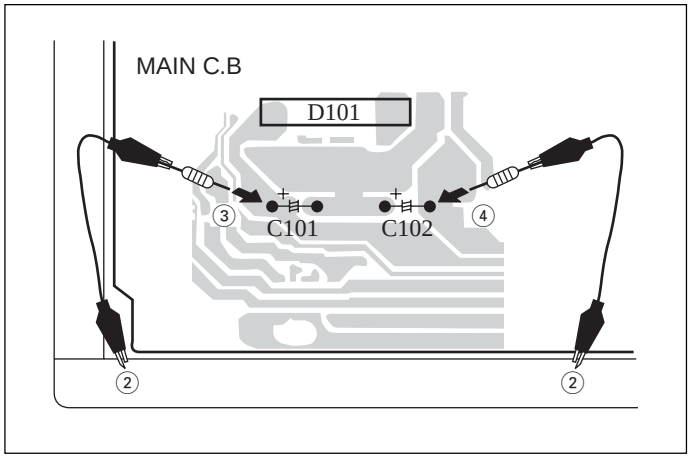


Fig-1

Select a discharging resistor referring to the following table.

Charging voltage (V) (C101, 102)	Discharging resistor (Ω)	Rated power (W)	Parts number
25-48	100	3	87-A00-247-090
49-140	220	5	87-A00-232-090

Note: The reference numbers (C101, C102) of the electrolytic capacitors can change depending on the models. Be sure to check the reference numbers of the charging capacitors on schematic diagram before starting the discharging work.

2. Check items before exchanging the MICROCOMPUTER

Be sure to check the following items before exchanging the MICROCOMPUTER. Exchange the MICROCOMPUTER after confirming that the MICROCOMPUTER is surely defective.

2-1. Regarding the HOLD terminal of the MICROCOMPUTER

When the HOLD terminal (INPUT) of the MICROCOMPUTER is "H", the MICROCOMPUTER is judged to be operating correctly. When this terminal is "L", the main power cannot be turned on. Therefore, be sure to check the terminal voltage of the HOLD terminal before exchange.
When the MICROCOMPUTER is not defective, the HOLD terminal can also go "L" when the POWER AMPLIFIER has any abnormalities that triggers the abnormality detection circuit on the MAIN C. B. that sets the HOLD terminal to "L".

- Good or no good judgement of the MICROCOMPUTER

① Turn on the AC main power.
② Confirm that the main power is turned on and the HOLD terminal of the MICROCOMPUTER keeps the "H" level or not.
③ When the HOLD terminal is "L" level, the abnormality detection circuit is judged to be working correctly and the MICROCOMPUTER is judged to be good.

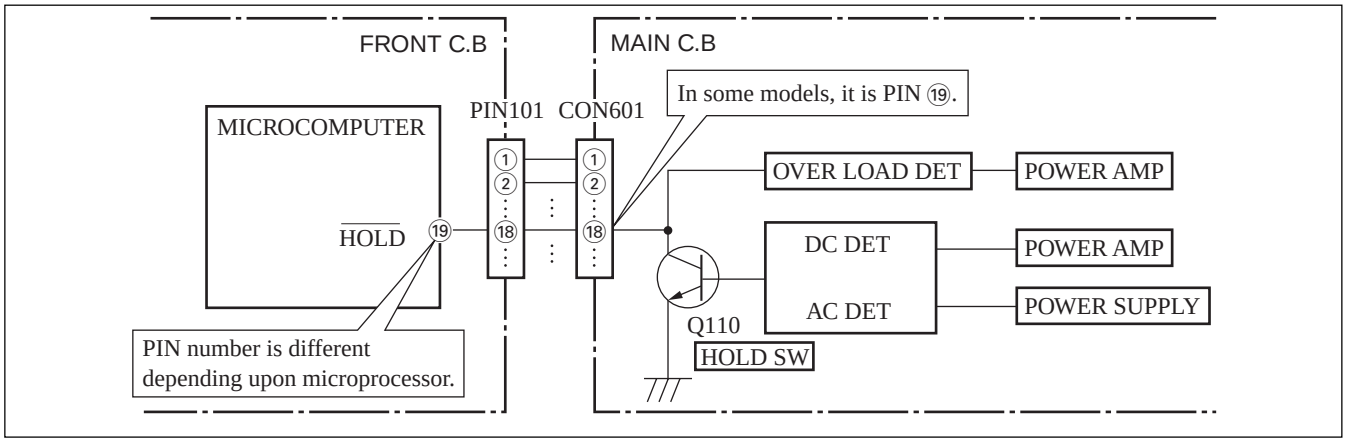


Fig-2-1

In such a case, check also if the POWER AMPLIFIER circuit or power supply circuit has any abnormalities or not.

2-2. Regarding reset

There are cases that the machine does not work correctly because the MICROCOMPUTER is not reset even though the AC power cord is re-inserted, or the software reset (pressing the STOP key + POWER key) is performed.
When the above described phenomenon occurs, it can lead to wrong judgement as if the MICROCOMPUTER is defective and to exchange the MICROCOMPUTER. In such a case, perform the forced-reset by the following procedure and check good or no good of the MICROCOMPUTER.

① Remove the AC power cord.

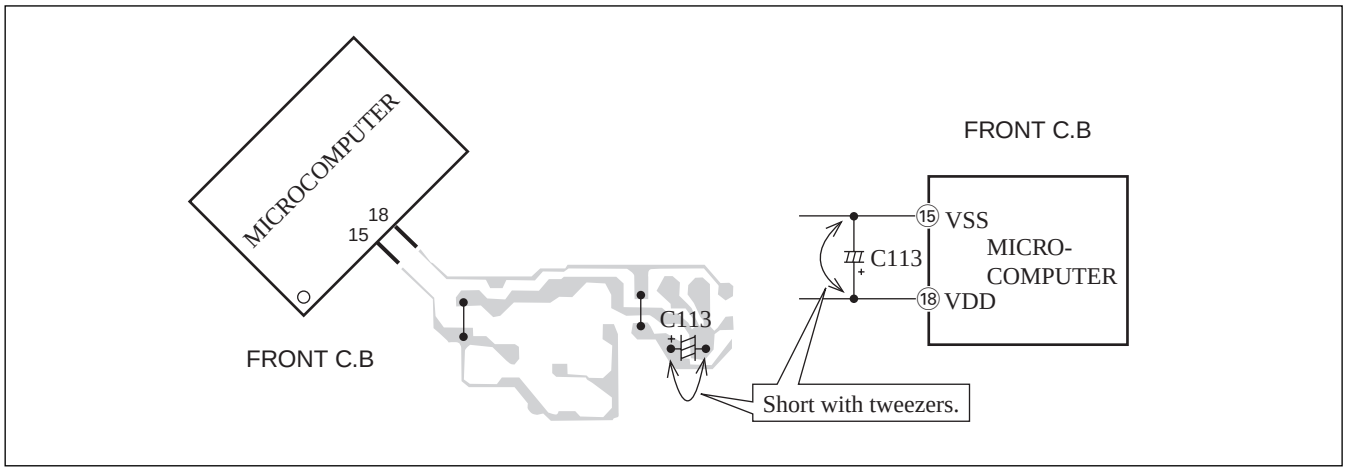


Fig-2-2

② Short both ends of the electrolytic capacitor C113 that is connected to VDD of the MICROCOMPUTER with tweezers.
③ Connect the AC power cord again. If the MICROCOMPUTER returns to the normal operation, the MICROCOMPUTER is good.

Note: The reference number or MICROCOMPUTER pin number of transistor (Q110) and electrolytic capacitor (C113) can change depending on the models. Be sure to check the reference numbers on schematic diagram before starting the discharging work.

2-3. Confirmation of soldering state of MICROCOMPUTER

Check the soldering state of the MICROCOMPUTER in addition to the above described procedures. Be sure to exchange the MICROCOMPUTER after surely confirming that the trouble is not caused by poor soldering but the MICROCOMPUTER itself.

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8A-NFA-615-010		C-IC,M38B57MCH-E236FP <EXCEPT 12EZ>
	8A-NFA-616-010		C-IC,M38B59MFH-E251FP<12EZ>
	87-A21-397-010		IC,STK490-070<11LHSC2>
	87-A21-482-010		IC,RPM6938-H4
	87-A21-419-040		C-IC,NJM14558MD-TE2
	87-A21-443-040		C-IC,M62495AFP
	87-A21-560-010		IC,LA1844L-A
	87-A20-440-040		C-IC,BU1920FS<12EZ>
	87-070-127-110		IC,LC72131 D
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-610-080		TR,KTC3198GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-075-080		C-TR,2SA1235F
	87-026-245-080		TR,DTC114ES<10HR,11LHSC2>
	87-A30-198-080		TR,KTC3199GR<10HR,11LHSC2>
	87-A30-107-070		C-TR,CMBT5401<10HR,11LHSC2>
	87-A30-484-080		C-TR,KRA102S
	87-A30-090-080		FET,2SK2541
	87-A30-468-080		C-TR,KRC102S-RTK
	87-A30-190-080		TR,CC5551<10HR>
	87-A30-256-010		TR,2SD1933<EXCEPT 11LHSC2>
	87-A30-255-010		TR,2SB1342<EXCEPT 11LHSC2>
	87-A30-106-040		C-TR,CMBT5551<10HR,11LHSC2>
	87-A30-091-080		FET,2SJ460
	87-A30-062-080		C-TR,KRC104S
	87-A30-495-080		TR,2SA1981Y
	87-A30-492-080		TR,2SC5343G
	87-A30-234-080		TR,CSC4115BC
	89-327-143-080		TR,2SC2714 (0.1W)
	87-A30-489-080		C-TR,KRA107S
	87-A30-074-080		C-TR,RT1P 141C<10HR>
	87-A30-086-040		C-TR,CSD1306E<EXCEPT 11LHSC2>
	89-503-602-080		C-FET,2SK360E<EXCEPT 11LHSC2>
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-455-080		DIODE,RL203 GW
	87-A40-553-080		DIODE,1N4003 LES
	87-A40-774-080		ZENER,UZ24BSD
	87-A40-764-080		ZENER,UZ10BSC
	87-A40-313-080		C-DIODE,MC 2840<11LHSC2>
	87-A40-270-080		C-DIODE,MC2838<EXCEPT 10HR>
	87-A40-269-080		C-DIODE,MC2836<EXCEPT 10HR>
	87-A40-768-080		ZENER,UZ16BSA<11LHSC2>
	87-A40-752-080		ZENER,UZ6.2BSC
	87-A40-739-080		ZENER,UZ2.7BSA
	87-A40-618-080		VARI-CAP,SVC 348(S/T)<10HR>
	87-017-149-080		ZENER,HZS6A2L
MAIN C.B			
C1	87-010-387-080		CAP,E 470-25 SME<11LHSC2>
C1	87-010-387-080		CAP,E 470-25 SME<10HR>
C3	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C4	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C5	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C6	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C9	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C9	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C10	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C10	87-010-196-080		CHIP CAPACITOR,0.1-25 <11LHSC2>
C11	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C11	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C12	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C12	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C19	87-A10-627-000		CAP,E 2200-50 M SMG<11LHSC2>
C20	87-A10-627-000		CAP,E 2200-50 M SMG<11LHSC2>
C21	87-016-495-000		CAP,E 3300-25 M SMG<11LHSC2>
C21	87-A10-520-000		CAP,E 3300-35 M SMG <EXCEPT 11LHSC2>
C22	87-016-051-000		CAP,E 2200-35 M SMG <EXCEPT 11LHSC2>
C22	87-016-495-000		CAP,E 3300-25 M SMG<11LHSC2>
C25	87-010-406-080		CAP, ELECT 22-50<10HR>
C25	87-010-385-080		CAP, ELECT 220-25V<11LHSC2>
C25	87-010-407-080		CAP, ELECT 33-50V <10EZ,12EZ,17EZ,10K>
C26	87-010-247-080		CAP, ELECT 100-50V<11LHSC2>
C26	87-010-406-080		CAP, ELECT 22-50<EXCEPT 11LHSC2>
C30	87-010-384-080		CAP, ELECT 100-25V <EXCEPT 11LHSC2>
C30	87-010-247-080		CAP, ELECT 100-50V<11LHSC2>
C31	87-010-263-080		CAP, ELECT 100-10V <EXCEPT 11LHSC2>
C31	87-010-263-080		CAP, ELECT 100-10V<11LHSC2>
C32	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C32	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C34	87-010-247-080		CAP, ELECT 100-50V<11LHSC2>
C34	87-010-380-080		CAP, ELECT 47-16V<EXCEPT 11LHSC2>
C35	87-010-406-080		CAP, ELECT 22-50
C36	87-010-381-080		CAP, ELECT 330-16V<11LHSC2>
C36	87-010-381-080		CAP, ELECT 330-16V <EXCEPT 11LHSC2>
C38	87-010-190-080		S CHIP F 0.01<EXCEPT 11LHSC2>
C38	87-010-190-080		S CHIP F 0.01<11LHSC2>
C50	87-010-384-080		CAP, ELECT 100-25V <EXCEPT 11LHSC2>
C60	87-010-403-080		CAP, ELECT 3.3-50V<11LHSC2>
C60	87-010-403-080		CAP, ELECT 3.3-50V <EXCEPT 11LHSC2>
C61	87-010-380-080		CAP, ELECT 47-16V<EXCEPT 11LHSC2>
C61	87-010-260-080		CAP, ELECT 47-25V<11LHSC2>
C97	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C101	87-010-183-080		C-CAP,S 2700P-50 B<11LHSC2>
C101	87-010-185-080		C-CAP,S 3900P-50 B <EXCEPT 11LHSC2>
C102	87-010-183-080		C-CAP,S 2700P-50 B<11LHSC2>
C102	87-010-185-080		C-CAP,S 3900P-50 B <EXCEPT 11LHSC2>
C103	87-010-545-080		CAP, ELECT 0.22-50V <EXCEPT 11LHSC2>
C103	87-010-545-080		CAP, ELECT 0.22-50V<11LHSC2>
C104	87-010-545-080		CAP, ELECT 0.22-50V<11LHSC2>
C104	87-010-545-080		CAP, ELECT 0.22-50V <EXCEPT 11LHSC2>
C105	87-010-186-080		CAP,CHIP 4700P<EXCEPT 11LHSC2>
C105	87-010-178-080		CHIP CAP 1000P<11LHSC2>
C106	87-010-186-080		CAP,CHIP 4700P<EXCEPT 11LHSC2>
C106	87-010-178-080		CHIP CAP 1000P<11LHSC2>
C107	87-010-403-080		CAP, ELECT 3.3-50V <EXCEPT 11LHSC2>
C107	87-010-404-080		CAP, ELECT 4.7-50V<11LHSC2>
C108	87-010-403-080		CAP, ELECT 3.3-50V <EXCEPT 11LHSC2>
C108	87-010-404-080		CAP, ELECT 4.7-50V<11LHSC2>
C109	87-010-322-080		C-CAP,S 100P-50 CH <10EZ,12EZ,17EZ,10K>
C110	87-010-322-080		C-CAP,S 100P-50 CH <10EZ,12EZ,17EZ,10K>
C111	87-010-406-080		CAP, ELECT 22-50<EXCEPT 11LHSC2>
C111	87-010-391-080		CAP,E 10-35 SME<11LHSC2>
C112	87-010-406-080		CAP, ELECT 22-50<EXCEPT 11LHSC2>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C112	87-010-391-080		CAP,E 10-35 SME<11LHSC2>
C113	87-A10-946-080		C-CAP,S 220P-100 J CH<10HR>
C113	87-012-156-080		C-CAP,S 220P-50 CH <10EZ,12EZ,17EZ,10K>
C113	87-010-405-080		CAP, ELECT 10-50V<11LHSC2>
C114	87-A10-946-080		C-CAP,S 220P-100 J CH<10HR>
C114	87-012-156-080		C-CAP,S 220P-50 CH <10EZ,12EZ,17EZ,10K>
C114	87-010-405-080		CAP, ELECT 10-50V<11LHSC2>
C119	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C119	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C120	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C120	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C123	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 10HR>
C124	87-010-197-080		CAP, CHIP 0.01 DM <10EZ,12EZ,17EZ,10K>
C125	87-012-368-080		C-CAP,S 0.1-50 F<11LHSC2>
C125	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C126	87-012-368-080		C-CAP,S 0.1-50 F<11LHSC2>
C126	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C127	87-012-368-080		C-CAP,S 0.1-50 F<11LHSC2>
C127	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C128	87-012-368-080		C-CAP,S 0.1-50 F<11LHSC2>
C128	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C129	87-A10-592-080		C-CAP,S 0.015-50 J B<11LHSC2>
C130	87-A10-592-080		C-CAP,S 0.015-50 J B<11LHSC2>
C131	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C132	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C133	87-010-186-080		CAP,CHIP 4700P<11LHSC2>
C133	87-010-186-080		CAP,CHIP 4700P<EXCEPT 11LHSC2>
C140	87-010-182-080		C-CAP,S 2200P-50 B <EXCEPT 11LHSC2>
C140	87-010-182-080		C-CAP,S 2200P-50 B<11LHSC2>
C301	87-010-179-080		CAP,CHIP S B1200P<EXCEPT 11LHSC2>
C301	87-010-179-080		CAP,CHIP S B1200P<11LHSC2>
C302	87-010-179-080		CAP,CHIP S B1200P<EXCEPT 11LHSC2>
C302	87-010-179-080		CAP,CHIP S B1200P<11LHSC2>
C303	87-010-178-080		CHIP CAP 1000P<EXCEPT 11LHSC2>
C303	87-010-178-080		CHIP CAP 1000P<11LHSC2>
C304	87-010-178-080		CHIP CAP 1000P<EXCEPT 11LHSC2>
C304	87-010-178-080		CHIP CAP 1000P<11LHSC2>
C305	87-010-198-080		CAP, CHIP 0.022<EXCEPT 11LHSC2>
C307	87-010-263-080		CAP, ELECT 100-10V<11LHSC2>
C307	87-010-263-080		CAP, ELECT 100-10V <EXCEPT 11LHSC2>
C308	87-010-263-080		CAP, ELECT 100-10V<11LHSC2>
C308	87-010-263-080		CAP, ELECT 100-10V <EXCEPT 11LHSC2>
C309	87-010-318-080		C-CAP,S 47P-50 CH<10HR>
C309	87-010-318-080		C-CAP,S 47P-50 CH<11LHSC2>
C309	87-010-311-080		CAP 12P<10EZ,12EZ,17EZ,10K>
C310	87-010-314-080		C-CAP,S 22P-50V <10EZ,12EZ,17EZ,10K>
C310	87-010-318-080		C-CAP,S 47P-50 CH<11LHSC2>
C310	87-010-318-080		C-CAP,S 47P-50 CH<10HR>
C311	87-010-598-080		C-CAP,S 0.068-16VRK <EXCEPT 11LHSC2>
C312	87-010-598-080		C-CAP,S 0.068-16VRK <EXCEPT 11LHSC2>
C313	87-010-188-080		CAP,CHIP 6800P<EXCEPT 11LHSC2>
C313	87-010-188-080		CAP,CHIP 6800P<11LHSC2>
C314	87-010-188-080		CAP,CHIP 6800P<EXCEPT 11LHSC2>
C314	87-010-188-080		CAP,CHIP 6800P<11LHSC2>
C315	87-010-263-080		CAP, ELECT 100-10V<11LHSC2>
C315	87-010-263-080		CAP, ELECT 100-10V <EXCEPT 11LHSC2>
C317	87-010-546-080		CAP, ELECT 0.33-50V <EXCEPT 11LHSC2>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C317	87-010-546-080		CAP, ELECT 0.33-50V<11LHSC2>
C318	87-010-546-080		CAP, ELECT 0.33-50V <EXCEPT 11LHSC2>
C318	87-010-546-080		CAP, ELECT 0.33-50V <11LHSC2>
C320	87-010-196-080		CAP,TC U 0.1-50 Z F <10EZ,12EZ,17EZ,10K>
C321	87-010-196-080		CAP,TC U 0.1-50 Z F <10EZ,12EZ,17EZ,10K>
C324	87-010-196-080		CAP,TC U 0.1-50 Z F <10EZ,12EZ,17EZ,10K>
C325	87-010-196-080		CAP,TC U 0.1-50 Z F <10EZ,12EZ,17EZ,10K>
C326	87-010-198-080		CAP, CHIP 0.022<11LHSC2>
C326	87-010-198-080		CAP, CHIP 0.022<EXCEPT 11LHSC2>
C327	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C327	87-010-196-080		CHIP CAPACITOR,0.1-25 <11LHSC2>
C350	87-010-196-080		CAP,TC U 0.1-50 Z F <10EZ,12EZ,17EZ,10K>
C360	87-010-401-080		CAP, ELECT 1-50V<EXCEPT 11LHSC2>
C360	87-010-401-080		CAP, ELECT 1-50V<11LHSC2>
C363	87-010-197-080		CAP, CHIP 0.01 DM <10EZ,12EZ,17EZ,10K>
C399	87-012-140-080		CAP 470P<EXCEPT 11LHSC2>
C399	87-012-140-080		CAP 470P<11LHSC2>
C401	87-010-544-080		CAP, ELECT 0.1-50V <EXCEPT 11LHSC2>
C401	87-010-544-080		CAP, ELECT 0.1-50V<11LHSC2>
C402	87-010-544-080		CAP, ELECT 0.1-50V<11LHSC2>
C402	87-010-544-080		CAP, ELECT 0.1-50V <EXCEPT 11LHSC2>
C403	87-010-321-080		CHIP CAPACITOR,82P(J)<11LHSC2>
C403	87-010-321-080		CHIP CAPACITOR,82P(J) <EXCEPT 11LHSC2>
C404	87-010-321-080		CHIP CAPACITOR,82P(J) <EXCEPT 11LHSC2>
C404	87-010-321-080		CHIP CAPACITOR,82P(J)<11LHSC2>
C405	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C405	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C406	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C406	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C407	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C407	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C408	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C408	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C409	87-010-182-080		C-CAP,S 2200P-50 B<11LHSC2>
C409	87-010-182-080		C-CAP,S 2200P-50 B <EXCEPT 11LHSC2>
C410	87-010-182-080		C-CAP,S 2200P-50 B <EXCEPT 11LHSC2>
C410	87-010-182-080		C-CAP,S 2200P-50 B<11LHSC2>
C411	87-010-405-080		CAP, ELECT 10-50V<EXCEPT 11LHSC2>
C411	87-010-405-080		CAP, ELECT 10-50V<11LHSC2>
C412	87-010-405-080		CAP, ELECT 10-50V<EXCEPT 11LHSC2>
C412	87-010-405-080		CAP, ELECT 10-50V<11LHSC2>
C452	87-010-382-080		CAP, ELECT 22-25V<11LHSC2>
C452	87-010-382-080		CAP, ELECT 22-25V<EXCEPT 11LHSC2>
C453	87-010-183-080		C-CAP,S 2700P-50 B <EXCEPT 11LHSC2>
C453	87-010-183-080		C-CAP,S 2700P-50 B<11LHSC2>
C454	87-010-183-080		C-CAP,S 2700P-50 B <EXCEPT 11LHSC2>
C454	87-010-183-080		C-CAP,S 2700P-50 B<11LHSC2>
C455	87-010-183-080		C-CAP,S 2700P-50 B<11LHSC2>
C455	87-010-183-080		C-CAP,S 2700P-50 B <EXCEPT 11LHSC2>
C456	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C456	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C458	87-010-178-080		CHIP CAP 1000P <10EZ,12EZ,17EZ,10K>
C459	87-010-175-080		CAP 560P<10EZ,12EZ,17EZ,10K>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C460	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C460	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C461	87-012-158-080		C-CAP,S 390P-50 CH<11LHSC2>
C461	87-012-158-080		C-CAP,S 390P-50 CH <EXCEPT 11LHSC2>
C462	87-012-158-080		C-CAP,S 390P-50 CH<11LHSC2>
C462	87-012-158-080		C-CAP,S 390P-50 CH <EXCEPT 11LHSC2>
C470	87-018-127-080		CAP, CER 470P-50V<EXCEPT 11LHSC2>
C605	87-010-179-080		CAP,CHIP S B1200P<EXCEPT 11LHSC2>
C605	87-010-179-080		CAP,CHIP S B1200P<11LHSC2>
C606	87-010-179-080		CAP,CHIP S B1200P<11LHSC2>
C606	87-010-179-080		CAP,CHIP S B1200P<EXCEPT 11LHSC2>
C609	87-010-213-080		C-CAP,S 0.015-50 B <EXCEPT 11LHSC2>
C609	87-010-213-080		C-CAP,S 0.015-50 B<11LHSC2>
C610	87-010-213-080		C-CAP,S 0.015-50 B <EXCEPT 11LHSC2>
C610	87-010-213-080		C-CAP,S 0.015-50 B<11LHSC2>
C611	87-010-545-080		CAP, ELECT 0.22-50V <EXCEPT 11LHSC2>
C611	87-010-545-080		CAP, ELECT 0.22-50V<11LHSC2>
C612	87-010-545-080		CAP, ELECT 0.22-50V<11LHSC2>
C612	87-010-545-080		CAP, ELECT 0.22-50V <EXCEPT 11LHSC2>
C613	87-010-545-080		CAP, ELECT 0.22-50V<11LHSC2>
C613	87-010-545-080		CAP, ELECT 0.22-50V <EXCEPT 11LHSC2>
C614	87-010-545-080		CAP, ELECT 0.22-50V <EXCEPT 11LHSC2>
C614	87-010-545-080		CAP, ELECT 0.22-50V<11LHSC2>
C615	87-010-154-080		CAP CHIP 10P<11LHSC2>
C615	87-010-154-080		CAP CHIP 10P<EXCEPT 11LHSC2>
C616	87-010-248-080		CAP, ELECT 220-10V <EXCEPT 11LHSC2>
C616	87-010-385-080		CAP, ELECT 220-25V<11LHSC2>
C617	87-010-248-080		CAP, ELECT 220-10V <EXCEPT 11LHSC2>
C617	87-010-385-080		CAP, ELECT 220-25V<11LHSC2>
C618	87-010-405-080		CAP, ELECT 10-50V<EXCEPT 11LHSC2>
C618	87-010-405-080		CAP, ELECT 10-50V<11LHSC2>
C630	87-016-669-080		C-CAP,S 0.1-25 K B <EXCEPT 11LHSC2>
C630	87-016-669-080		C-CAP,S 0.1-25 K B<11LHSC2>
C669	87-010-322-080		C-CAP,S 100P-50 CH <10EZ,12EZ,17EZ,10K>
C669	87-010-322-080		C-CAP,S 100P-50 CH<11LHSC2>
C670	87-010-322-080		C-CAP,S 100P-50 CH <10EZ,12EZ,17EZ,10K>
C670	87-010-322-080		C-CAP,S 100P-50 CH<11LHSC2>
C677	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C677	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C771	87-010-263-080		CAP, ELECT 100-10V<11LHSC2>
C771	87-010-263-080		CAP, ELECT 100-10V <EXCEPT 11LHSC2>
C772	87-010-197-080		CAP, CHIP 0.01 DM
C779	87-010-971-080		C-CAP,S 4700P-50 B J <10EZ,12EZ,17EZ,10K>
C780	87-010-971-080		C-CAP,S 4700P-50 B J <10EZ,12EZ,17EZ,10K>
C782	87-010-197-080		CAP, CHIP 0.01 DM
C783	87-010-197-080		CAP, CHIP 0.01 DM
C784	87-010-197-080		CAP, CHIP 0.01 DM
C785	87-010-197-080		CAP, CHIP 0.01 DM
C786	87-010-197-080		CAP, CHIP 0.01 DM
C788	87-010-149-080		C-CAP,S 5P-50 CH<11LHSC2>
C788	87-010-149-080		C-CAP,S 5P-50 CH<EXCEPT 11LHSC2>
C789	87-A10-801-080		C-CAP,S 0.022-16 J B CM <EXCEPT 11LHSC2>
C789	87-A12-052-080		C-CAP,S 0.033-25 J B<11LHSC2>
C790	87-A10-801-080		C-CAP,S 0.022-16 J B CM <EXCEPT 11LHSC2>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C790	87-A12-052-080		C-CAP,S 0.033-25 J B<11LHSC2>
C791	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C791	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C792	87-010-197-080		CAP, CHIP 0.01 DM
C793	87-010-404-080		CAP, ELECT 4.7-50V<11LHSC2>
C793	87-010-404-080		CAP, ELECT 4.7-50V <EXCEPT 11LHSC2>
C794	87-010-322-080		C-CAP,S 100P-50 CH <10EZ,12EZ,17EZ,10K>
C795	87-010-197-080		CAP, CHIP 0.01 DM
C796	87-010-197-080		CAP, CHIP 0.01 DM
C797	87-010-405-080		CAP, ELECT 10-50V<11LHSC2>
C797	87-010-405-080		CAP, ELECT 10-50V<EXCEPT 11LHSC2>
C798	87-010-197-080		CAP, CHIP 0.01 DM
C799	87-010-407-080		CAP, ELECT 33-50V<EXCEPT 11LHSC2>
C799	87-010-407-080		CAP, ELECT 33-50V<11LHSC2>
C800	87-012-369-080		C-CAP,S 0.047-50F<11LHSC2>
C800	87-012-369-080		C-CAP,S 0.047-50F<EXCEPT 11LHSC2>
C801	87-010-403-080		CAP, ELECT 3.3-50V
C802	87-012-369-080		C-CAP,S 0.047-50F<11LHSC2>
C802	87-012-369-080		C-CAP,S 0.047-50F<EXCEPT 11LHSC2>
C803	87-010-198-080		CAP, CHIP 0.022<11LHSC2>
C803	87-010-198-080		CAP, CHIP 0.022<EXCEPT 11LHSC2>
C804	87-010-263-080		CAP, ELECT 100-10V<11LHSC2>
C804	87-010-263-080		CAP, ELECT 100-10V <EXCEPT 11LHSC2>
C807	87-010-400-080		CAP, ELECT 0.47-50V
C808	87-010-401-080		CAP, ELECT 1-50V<EXCEPT 11LHSC2>
C808	87-010-401-080		CAP, ELECT 1-50V<11LHSC2>
C809	87-010-401-080		CAP, ELECT 1-50V<11LHSC2>
C809	87-010-401-080		CAP, ELECT 1-50V<EXCEPT 11LHSC2>
C810	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C810	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C811	87-010-403-080		CAP, ELECT 3.3-50V<10HR>
C812	87-010-403-080		CAP, ELECT 3.3-50V<10HR>
C814	87-010-197-080		CAP, CHIP 0.01 DM
C815	87-010-400-080		CAP, ELECT 0.47-50V <EXCEPT 11LHSC2>
C815	87-010-403-080		CAP, ELECT 3.3-50V<11LHSC2>
C816	87-010-400-080		CAP, ELECT 0.47-50V <EXCEPT 11LHSC2>
C816	87-010-403-080		CAP, ELECT 3.3-50V<11LHSC2>
C818	87-010-180-080		C-CER 1500P<10EZ,12EZ,17EZ,10K>
C821	87-010-405-080		CAP, ELECT 10-50V<EXCEPT 11LHSC2>
C821	87-010-405-080		CAP, ELECT 10-50V<11LHSC2>
C823	87-012-349-080		C-CAP,S 1000P-50 CH <10EZ,12EZ,17EZ,10K>
C823	87-010-177-080		C-CAP,S 820P-50 SL<10HR>
C823	87-010-177-080		C-CAP,S 820P-50 SL<11LHSC2>
C824	87-010-404-080		CAP, ELECT 4.7-50V <EXCEPT 11LHSC2>
C824	87-010-404-080		CAP, ELECT 4.7-50V<11LHSC2>
C825	87-010-596-080		CAP, S 0.047-16<11LHSC2>
C825	87-010-596-080		CAP, S 0.047-16<EXCEPT 11LHSC2>
C831	87-010-406-080		CAP, ELECT 22-50 <10EZ,12EZ,17EZ,10K>
C842	87-010-197-080		CAP, CHIP 0.01 DM
C844	87-010-197-080		CAP, CHIP 0.01 DM
C850	87-010-260-080		CAP, ELECT 47-25V<11LHSC2>
C850	87-010-260-080		CAP, ELECT 47-25V<EXCEPT 11LHSC2>
C851	87-010-197-080		CAP, CHIP 0.01 DM
C852	87-010-197-080		CAP, CHIP 0.01 DM
C853	87-010-197-080		CAP, CHIP 0.01 DM
C858	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C858	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C859	87-010-196-080		CHIP CAPACITOR,0.1-25 <EXCEPT 11LHSC2>
C859	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C860	87-010-197-080		CAP, CHIP 0.01 DM

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C869	87-010-197-080		CAP, CHIP 0.01 DM<12EZ>
C870	87-010-178-080		CHIP CAP 1000P<12EZ>
C871	87-012-156-080		C-CAP,S 220P-50 CH<12EZ>
C872	87-012-156-080		C-CAP,S 220P-50 CH<12EZ>
C873	87-012-140-080		CAP 470P<12EZ>
C874	87-010-405-080		CAP, ELECT 10-50V<12EZ>
C875	87-010-196-080		CHIP CAPACITOR,0.1-25<12EZ>
C876	87-010-405-080		CAP, ELECT 10-50V<12EZ>
C877	87-010-197-080		CAP, CHIP 0.01 DM<12EZ>
C878	87-010-316-080		C-CAP,S 33P-50 CH<12EZ>
C879	87-010-314-080		C-CAP,S 22P-50V<12EZ>
C940	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C941	87-010-314-080		C-CAP,S 22P-50V<10HR>
C942	87-010-149-080		C-CAP,S 5P-50 CH<10EZ,12EZ,17EZ,10K>
C943	87-010-197-080		CAP, CHIP 0.01 DM<10HR>
C945	87-010-197-080		CAP, CHIP 0.01 DM<10HR>
C946	87-010-971-080		C-CAP,S 4700P-50 B J<10HR>
C947	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C948	87-012-140-080		CAP 470P<10EZ,12EZ,17EZ,10K>
C948	87-010-148-080		CAP, CHIP S 4P SL<10HR>
C952	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C953	87-010-197-080		CAP, CHIP 0.01 DM<10HR>
C954	87-010-400-080		CAP, ELECT 0.47-50V<10HR>
C956	87-010-263-080		CAP, ELECT 100-10V<10HR>
C957	87-010-311-080		CAP 12P<10EZ,12EZ,17EZ,10K>
C958	87-010-197-080		CAP, CHIP 0.01 DM<10EZ,12EZ,17EZ,10K>
C959	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C959	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C960	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 10HR>
C961	87-010-152-080		C-CAP,S 8P-50 CH<11LHSC2>
C962	87-010-401-080		CAP, ELECT 1-50V<EXCEPT 11LHSC2>
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z<EXCEPT 11LHSC2>
C963	87-015-785-080		CHIP CAPACITOR, 0.1FZ-25Z<11LHSC2>
C964	87-010-854-080		C-CAP,S 560PCH<10HR>
C971	87-010-381-080		CAP, ELECT 330-16V<EXCEPT 11LHSC2>
C971	87-010-381-080		CAP, ELECT 330-16V<11LHSC2>
C972	87-010-404-080		CAP, ELECT 4.7-50V<11LHSC2>
C972	87-010-404-080		CAP, ELECT 4.7-50V<EXCEPT 11LHSC2>
C973	87-010-197-080		CAP, CHIP 0.01 DM
C974	87-010-197-080		CAP, CHIP 0.01 DM
C979	87-010-322-080		C-CAP,S 100P-50 CH
C981	87-010-260-080		CAP, ELECT 47-25V<EXCEPT 11LHSC2>
C981	87-010-260-080		CAP, ELECT 47-25V<11LHSC2>
C982	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C982	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C983	87-010-197-080		CAP, CHIP 0.01 DM
C984	87-010-197-080		CAP, CHIP 0.01 DM
C985	87-010-322-080		C-CAP,S 100P-50 CH<10EZ,12EZ,17EZ,10K>
C987	87-010-197-080		CAP, CHIP 0.01 DM
C989	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C991	87-010-312-080		C-CAP,S 15P-50 CH<11LHSC2>
C991	87-010-312-080		C-CAP,S 15P-50 CH<EXCEPT 11LHSC2>
C992	87-010-312-080		C-CAP,S 15P-50 CH<11LHSC2>
C992	87-010-312-080		C-CAP,S 15P-50 CH<EXCEPT 11LHSC2>
C993	87-010-178-080		CHIP CAP 1000P<EXCEPT 11LHSC2>
C993	87-010-178-080		CHIP CAP 1000P<11LHSC2>
C995	87-010-178-080		CHIP CAP 1000P<11LHSC2>
C995	87-010-178-080		CHIP CAP 1000P<EXCEPT 11LHSC2>
C997	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C997	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C998	87-010-260-080		CAP, ELECT 47-25V<EXCEPT 11LHSC2>
C998	87-010-260-080		CAP, ELECT 47-25V<11LHSC2>
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F<11LHSC2>
C999	87-A11-155-080		CAP,TC U 0.01-16 Z F<EXCEPT 11LHSC2>
CF831	87-008-423-010		CERAMIC FILTER, SFE10.7<10EZ,12EZ,17EZ,10K>
CF831	87-008-261-010		FILTER, SFE10.7MA5-A<11LHSC2>
CF831	87-008-261-010		FILTER, SFE10.7MA5-A<10HR>
CF832	82-785-747-010		CF MS2 GHY R<10EZ,12EZ,17EZ,10K>
CF832	87-008-261-010		FILTER, SFE10.7MA5-A<11LHSC2>
CF832	87-008-261-010		FILTER, SFE10.7MA5-A<10HR>
CN301	87-A60-620-010		CONN,3P V 2MM JMT<11LHSC2>
CN301	87-A60-620-010		CONN,3P V 2MM JMT<EXCEPT 11LHSC2>
CN351	87-A60-625-010		CONN,8P V 2MM JMT<EXCEPT 11LHSC2>
CN351	87-A60-625-010		CONN,8P V 2MM JMT<11LHSC2>
CN601	87-099-719-010		CONN,30P TYK-B(X)<11LHSC2>
CN601	87-099-719-010		CONN,30P TYK-B(X)<EXCEPT 11LHSC2>
CN602	87-099-194-010		CONN,6P 6216V<EXCEPT 11LHSC2>
CN602	87-099-194-010		CONN,6P 6216V<11LHSC2>
CNA1	8A-NF8-652-010		CONN ASSY,7P TID-A(480)<10HR>
CNA1	8A-NF8-653-010		CONN ASSY,9P TID-A(480)<11LHSC2>
FB301	87-008-372-080		FILTER, EMI BL OIRNI<10EZ,12EZ,17EZ,10K>
FB602	87-008-372-080		FILTER, EMI BL OIRNI<10EZ,12EZ,17EZ,10K>
FFE831	A8-6ZA-191-130		6ZA-1 FEENM<10EZ,12EZ,17EZ,10K>
FFE831	A8-8ZA-190-030		8ZA-1 FEUNM<10HR>
FFE831	A8-8ZA-191-030		8ZA-1 YFEUNM<11LHSC2>
J101	87-A60-602-010		JACK,DIA6.3 BLK ST W/SW TC<EXCEPT 11LHSC2>
J103	87-A60-238-010		TERMINAL,SP 4P (MSC)<EXCEPT 11LHSC2>
J202	87-A60-602-010		JACK,DIA6.3 BLK ST W/SW TC<11LHSC2>
J203	87-A60-238-010		TERMINAL,SP 4P (MSC)<11LHSC2>
J401	87-A61-243-010		JACK,6.3 BLK MONO W/SW V MSC<10HR>
J602	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN<11LHSC2>
J602	87-A60-881-010		JACK,PIN 2P MSP 242V05 PBSN<EXCEPT 11LHSC2>
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02<10HR>
J831	87-A60-202-010		TERMINAL,ANT 4P MSP-154V-02<11LHSC2>
J832	87-A60-403-010		TERMINAL,ANT PAL 2P HSP-312V05<10EZ,12EZ,17EZ,10K>
J940	87-A60-633-010		CONN,2P H 2.5MM JMT<10HR>
L101	87-A50-610-010		COIL,1UH K(MDEC)<11LHSC2>
L101	87-A50-610-010		COIL,1UH K(MDEC)<EXCEPT 11LHSC2>
L102	87-A50-610-010		COIL,1UH K(MDEC)<11LHSC2>
L102	87-A50-610-010		COIL,1UH K(MDEC)<EXCEPT 11LHSC2>
L451	87-007-342-010		COIL,OSC 85K BIAS<EXCEPT 11LHSC2>
L451	87-007-342-010		COIL,OSC 85K BIAS<11LHSC2>
L801	87-A50-608-010		COIL,FM DET-N(TOK)<11LHSC2>
L801	87-A50-608-010		COIL,FM DET-N(TOK)<EXCEPT 11LHSC2>
L802	87-A91-552-010		FLTR,CFMT-450AL (TOK)<10HR>
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)<10EZ,12EZ,17EZ,10K>
L802	87-A91-551-010		FLTR,PCFJZH-450 L(TOK)<11LHSC2>
L811	87-005-847-080		COIL,2.2UH(CECS)<11LHSC2>
L811	87-005-847-080		COIL,2.2UH(CECS)<EXCEPT 11LHSC2>
L832	87-005-847-080		COIL,2.2UH(CECS)<EXCEPT 11LHSC2>
L832	87-005-847-080		COIL,2.2UH(CECS)<11LHSC2>
L861	87-005-847-080		COIL,2.2UH(CECS)<12EZ>
L941	87-A50-020-010		COIL,ANT LW(COI)<10EZ,12EZ,17EZ,10K>
L941	87-A50-022-010		COIL,ANT SW(COI)<10HR>
L942	87-A50-019-010		COIL,OSC LW(COI)<10EZ,12EZ,17EZ,10K>
L942	87-A50-550-010		COIL,OSC SW-2N(COI)<10HR>
L943	87-A50-522-080		COIL,1MH K CEC<10HR>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
L944	87-A50-159-010		COIL,10MH K C2B<10HR>
L951	8A-NF8-668-010		COIL,AM PACK 2(TOK)<10EZ,12EZ,17EZ,10K>
L951	8A-NF8-667-010		COIL,AM PACK 4(TOK)<11LHSC2>
L952	87-A50-430-010		COIL,ANT MW(3BSW)<10HR>
L953	87-A50-431-010		COIL,OSC MW(3BSW)<10HR>
R129	87-A00-258-080		RES,M/F 0.22-1W J<10HR>
R130	87-A00-258-080		RES,M/F 0.22-1W J<10HR>
R131	87-A00-258-080		RES,M/F 0.22-1W J<11LHSC2>
R132	87-A00-258-080		RES,M/F 0.22-1W J<11LHSC2>
R143	87-A00-440-050		RES,220-1/2W J RP<11LHSC2>
R144	87-A00-440-050		RES,220-1/2W J RP<11LHSC2>
R145	87-A00-440-050		RES,220-1/2W J RP<11LHSC2>
R146	87-A00-440-050		RES,220-1/2W J RP<11LHSC2>
R991	87-010-322-080		C-CAP,S 100P-50 CH<11LHSC2>
R993	87-010-322-080		C-CAP,S 100P-50 CH<11LHSC2>
R995	87-010-322-080		C-CAP,S 100P-50 CH<11LHSC2>
TC941	87-011-254-080		TRIMER,20P LAR<10HR>
TC943	87-011-253-080		TRIMER,30P LAR<10HR>
VR401	87-NB7-602-010		VR,RTRY 10KAX1 1 V<10HR>
W181	85-NF5-628-010		F-CABLE 7P-2.5<10EZ,12EZ,17EZ,10K>
WH1	87-A90-460-010		HLDR,WIRE 2.5-7P<EXCEPT 11LHSC2>
WH1	87-A90-510-010		HLDR,WIRE 2.5-9P<11LHSC2>
X861	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309<12EZ>
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309<EXCEPT 11LHSC2>
X991	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309<11LHSC2>

FRONT C.B

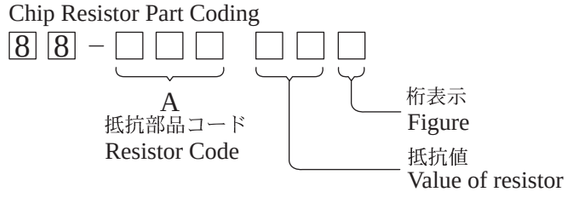
C101	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C101	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C102	87-012-369-080		C-CAP,S 0.047-50F<11LHSC2>
C102	87-012-369-080		C-CAP,S 0.047-50F<EXCEPT 11LHSC2>
C103	87-010-374-040		CAP,E 47-10<11LHSC2>
C103	87-010-374-040		CAP,E 47-10<EXCEPT 11LHSC2>
C104	87-A10-797-040		CAP,E 47-35 M 5L SRM<11LHSC2>
C104	87-A10-797-040		CAP,E 47-35 M 5L SRM<EXCEPT 11LHSC2>
C105	87-010-192-080		C-CAP,S 0.022-50 F<EXCEPT 11LHSC2>
C105	87-010-192-080		C-CAP,S 0.022-50 F<11LHSC2>
C107	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C107	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C108	87-010-178-080		CHIP CAP 1000P<EXCEPT 11LHSC2>
C108	87-010-178-080		CHIP CAP 1000P<11LHSC2>
C109	87-012-369-080		C-CAP,S 0.047-50F<EXCEPT 11LHSC2>
C109	87-012-369-080		C-CAP,S 0.047-50F<11LHSC2>
C110	87-010-197-080		CAP, CHIP 0.01 DM<11LHSC2>
C110	87-010-197-080		CAP, CHIP 0.01 DM<EXCEPT 11LHSC2>
C111	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C111	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C113	87-010-178-080		CHIP CAP 1000P<EXCEPT 11LHSC2>
C113	87-010-178-080		CHIP CAP 1000P<11LHSC2>
C114	87-010-154-080		CAP CHIP 10P<EXCEPT 11LHSC2>
C114	87-010-154-080		CAP CHIP 10P<11LHSC2>
C115	87-010-175-080		CAP 560P<11LHSC2>
C115	87-010-175-080		CAP 560P<EXCEPT 11LHSC2>
C116	87-010-400-040		CAP,E 0.47-50<11LHSC2>
C116	87-010-400-040		CAP,E 0.47-50<EXCEPT 11LHSC2>
C117	87-016-460-080		C-CAP,S 0.22-16 B<EXCEPT 11LHSC2>
C117	87-016-460-080		C-CAP,S 0.22-16 B<11LHSC2>
C118	87-A10-189-040		CAP,E 220-10<EXCEPT 11LHSC2>
C118	87-A10-189-040		CAP,E 220-10<11LHSC2>
C119	87-A10-189-040		CAP,E 220-10<11LHSC2>
C119	87-A10-189-040		CAP,E 220-10<EXCEPT 11LHSC2>
C120	87-012-156-080		C-CAP,S 220P-50 CH<EXCEPT 11LHSC2>
C120	87-012-156-080		C-CAP,S 220P-50 CH<11LHSC2>
C123	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C124	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C124	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C125	87-010-405-040		CAP,E 10-50<EXCEPT 11LHSC2>
C125	87-010-405-040		CAP,E 10-50<11LHSC2>
C126	87-010-196-080		CHIP CAPACITOR,0.1-25<11LHSC2>
C126	87-010-196-080		CHIP CAPACITOR,0.1-25<EXCEPT 11LHSC2>
C129	87-010-374-040		CAP,E 47-10<EXCEPT 11LHSC2>
C129	87-010-374-040		CAP,E 47-10<11LHSC2>
C210	87-012-156-080		C-CAP,S 220P-50 CH<EXCEPT 11LHSC2>
C210	87-012-156-080		C-CAP,S 220P-50 CH<11LHSC2>
C212	87-010-404-040		CAP,E 4.7-50 SME<11LHSC2>
C212	87-010-404-040		CAP,E 4.7-50 SME<EXCEPT 11LHSC2>
C213	87-010-404-040		CAP,E 4.7-50 SME<EXCEPT 11LHSC2>
C213	87-010-404-040		CAP,E 4.7-50 SME<11LHSC2>
C401	87-010-186-080		CAP,CHIP 4700P<10HR>
C402	87-010-060-040		CAP,E 100-16<10HR>
C403	87-010-545-040		CAP,E 0.22-50 SME<10HR>
C404	87-010-322-080		C-CAP,S 100P-50 CH<10HR>
C405	87-010-545-040		CAP,E 0.22-50 SME<10HR>
C406	87-016-669-080		C-CAP,S 0.1-25 K B<10HR>
C407	87-010-405-040		CAP,E 10-50<10HR>
C408	87-010-322-080		C-CAP,S 100P-50 CH<10HR>
C409	87-010-378-040		CAP,E 10-16<10HR>
C410	87-010-196-080		CHIP CAPACITOR,0.1-25<10HR>
C412	87-010-177-080		C-CAP,S 820P-50 SL<10HR>
C701	87-010-384-040		CAP,E 100-25 SME<EXCEPT 11LHSC2>
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN701	87-A60-673-010		CONN,9P H 2MM JMT
CN801	87-099-015-010		CONN,13P 6216V
EMI401	87-008-372-080		FILTER, EMI BL OIRNI<10HR>
FL201	8A-NFA-604-010		FL,10-BT-224GNK
L101	87-A50-434-010		COIL,CLK 4.19M(TOKO)
LED101	87-A40-317-080		LED,SLR-342VCT31 RED
S101	87-A91-555-010		SW,RTRY EC12E24504
S301	87-A90-164-080		SW,TACT SKQAB(N)
S302	87-A90-164-080		SW,TACT SKQAB(N)
S303	87-A90-164-080		SW,TACT SKQAB(N)
S304	87-A90-164-080		SW,TACT SKQAB(N)
S305	87-A90-164-080		SW,TACT SKQAB(N)
S306	87-A90-164-080		SW,TACT SKQAB(N)
S307	87-A90-164-080		SW,TACT SKQAB(N)
S308	87-A90-164-080		SW,TACT SKQAB(N)
S309	87-A90-164-080		SW,TACT SKQAB(N)
S310	87-A90-164-080		SW,TACT SKQAB(N)<12EZ>
S311	87-A90-164-080		SW,TACT SKQAB(N)<12EZ>
S312	87-A90-164-080		SW,TACT SKQAB(N)<12EZ>
S321	87-A90-164-080		SW,TACT SKQAB(N)
S322	87-A90-164-080		SW,TACT SKQAB(N)
S323	87-A90-164-080		SW,TACT SKQAB(N)
S324	87-A90-164-080		SW,TACT SKQAB(N)
S325	87-A90-164-080		SW,TACT SKQAB(N)
S326	87-A90-164-080		SW,TACT SKQAB(N)
S327	87-A90-164-080		SW,TACT SKQAB(N)
S328	87-A90-164-080		SW,TACT SKQAB(N)
S329	87-A90-164-080		SW,TACT SKQAB(N)
S330	87-A90-164-080		SW,TACT SKQAB(N)
S331	87-A90-164-080		SW,TACT SKQAB(N)
SFR701	87-024-431-080		SFR,3.3K RH063EC

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
PT C.B			
C31	87-010-403-080		CAP, ELECT 3.3-50V<10HR>
C31	87-010-403-080		CAP, ELECT 3.3-50V<11LHSC2>
C183	87-010-387-080		CAP,E 470-25 SME <10EZ,12EZ,17EZ,10K>
C184	87-010-403-080		CAP, ELECT 3.3-50V <10EZ,12EZ,17EZ,10K>
C185	87-018-209-080		CAP, CER 0.1-50V <10EZ,12EZ,17EZ,10K>
CN1	87-A61-109-010		CONN,7P V TID-A<10HR>
CN1	87-A61-110-010		CONN,9P V TID-A<11LHSC2>
⚠PT1	8A-NFA-606-010		PT,ANF-A HR<10HR>
⚠PT1	8A-NFA-608-010		PT,ANF-A EZ<10EZ,12EZ,17EZ,10K>
⚠PT1	8A-NFA-609-010		PT,ANF-A LH<11LHSC2>
⚠PT2	8A-NF8-673-010		PT,SUB ANF-8 (H)KAMI<10HR>
⚠PT2	8A-NF8-673-010		PT,SUB ANF-8 (H)KAMI<11LHSC2>
⚠PT181	8A-NF8-662-010		PT,SUB ANF-8 (E) <10EZ,12EZ,17EZ,10K>
⚠RY1	87-A91-281-010		RELAY,AC DC12V OSA-SS-212DM5 <11LHSC2>
⚠RY1	87-A91-281-010		RELAY,AC DC12V OSA-SS-212DM5 <10HR>
⚠RY181	87-A90-976-010		RELAY,AC12V SDT-S-112LMR <10EZ,12EZ,17EZ,10K>
⚠S1	87-A90-165-010		SW,SL 1-2-3 SWS2301<10HR>
⚠S1	87-A90-165-010		SW,SL 1-2-3 SWS2301<11LHSC2>
T1	87-A60-317-010		TERMINAL, 1P MSC<10HR>
T1	87-A60-317-010		TERMINAL, 1P MSC<11LHSC2>
T2	87-A60-317-010		TERMINAL, 1P MSC<10HR>
T2	87-A60-317-010		TERMINAL, 1P MSC<11LHSC2>
T181	87-A60-317-010		TERMINAL, 1P MSC <10EZ,12EZ,17EZ,10K>
T182	87-A60-317-010		TERMINAL, 1P MSC <10EZ,12EZ,17EZ,10K>
WH181	87-A90-460-010		HLDR,WIRE 2.5-7P <10EZ,12EZ,17EZ,10K>

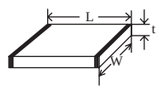
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

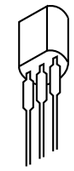
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

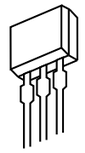
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード ：A Resistor Code ：A
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION



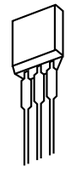
E C B

CSA952
CSC4115
KTA1266
KTC3198
KTC3199



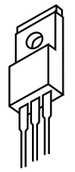
S D G

2SJ460
2SK2541



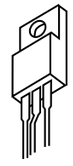
E C B

DTC114ES



B C E

2SB1370
2SB1342
2SD1933

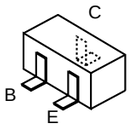


B C E

2SC3331

E B C

CC5551



2SA1235
2SC2714
2SC3052
CMBT5401
CMBT5551

KRA102
KRA107
KRC102
KRC104

A MAIN C.B

TO CD MECHANISM
FC602
CN602

TO DECK2
CON301
TO CN301

TO DECK1
CON351
TO CN351

J832
ANTENNA

MW/LW LOOP

FM 75Ω (COAXIAL)

J602
VIDEO/ AUX

TO C PT C.B
CNA001

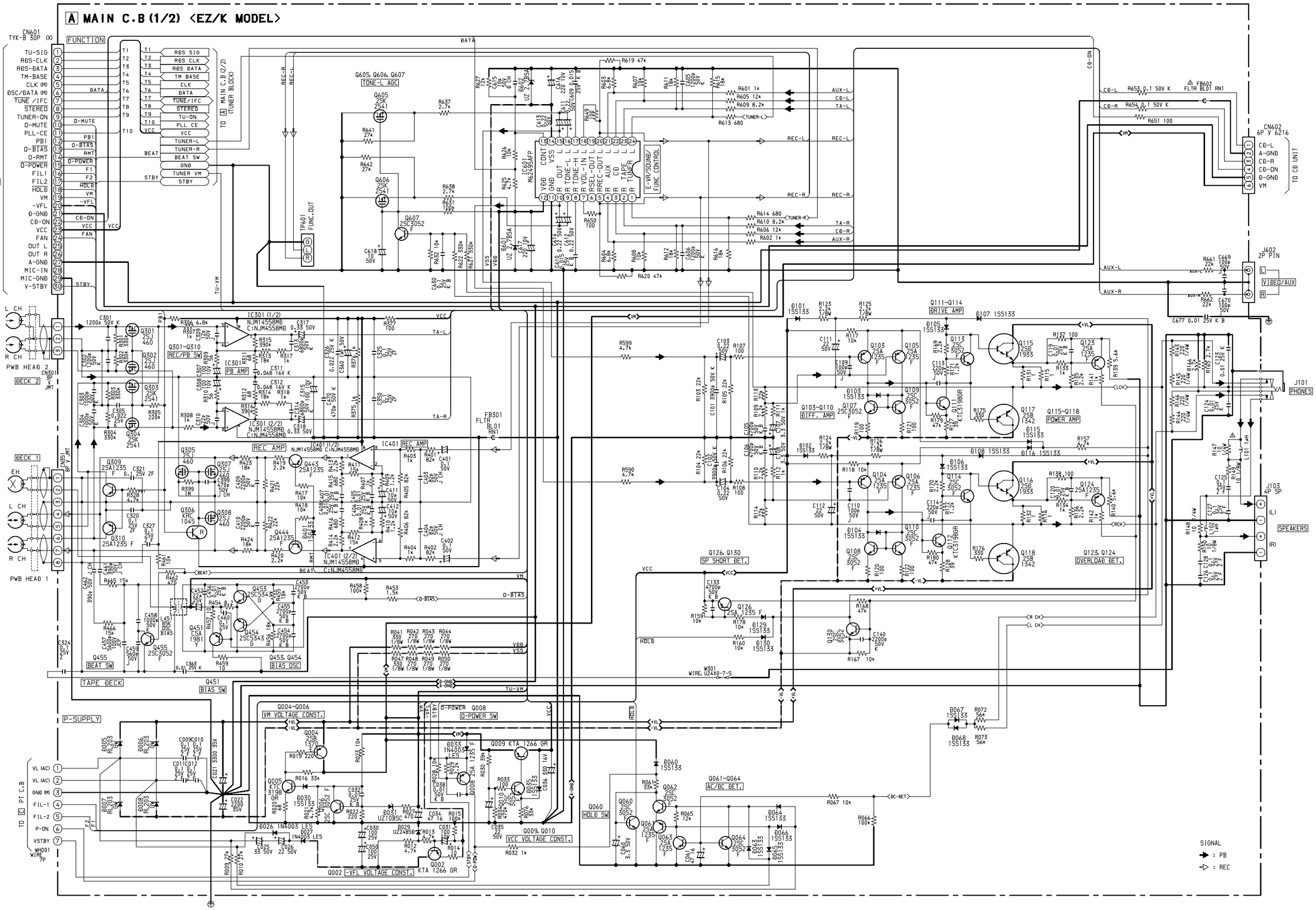
J103
SPEAKERS
1MP : 6Ω

CN101
TO B FRONT C.B

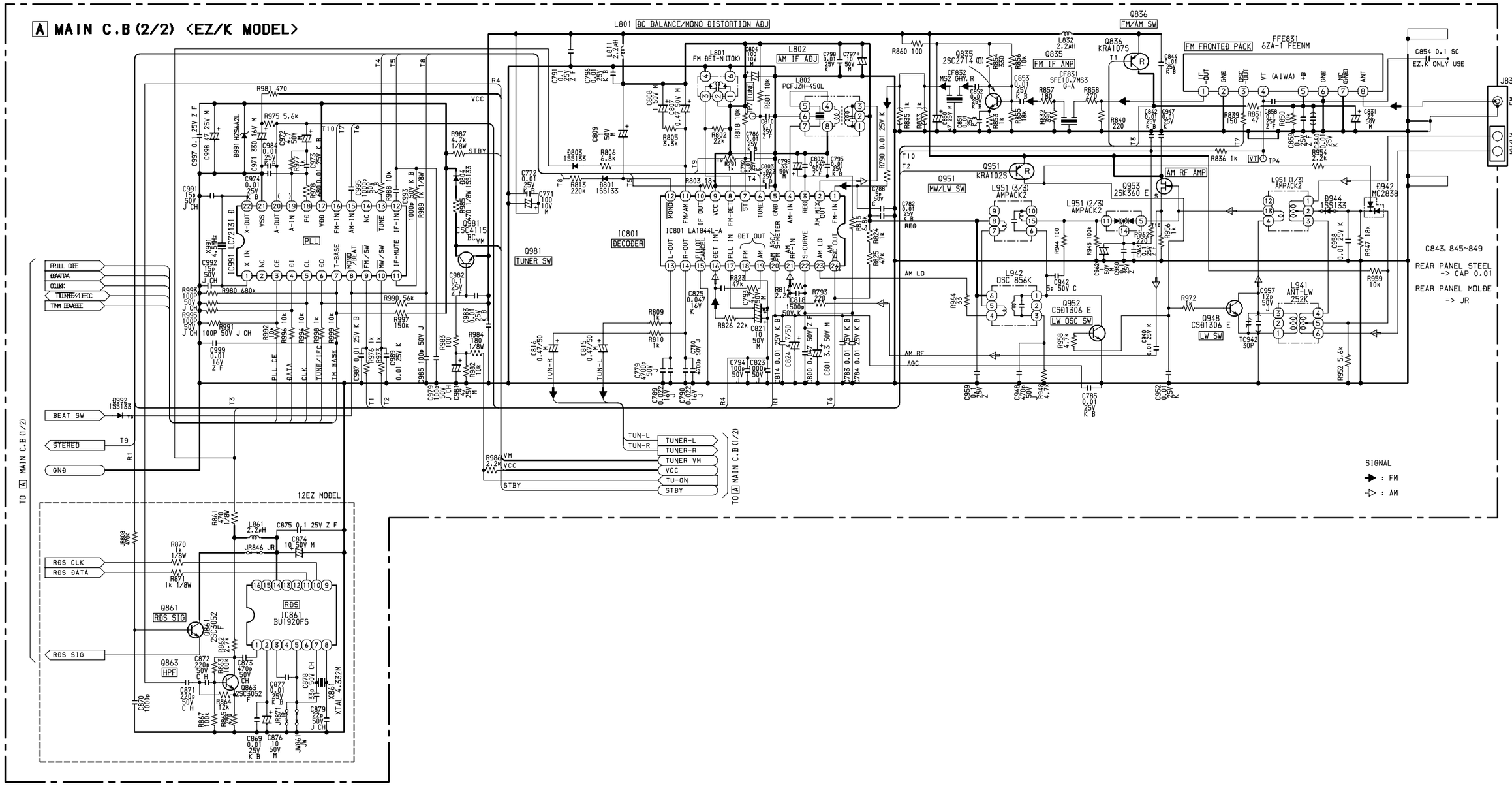
CN601

J101
PHONES

SCHEMATIC DIAGRAM-1 (MAIN 1/2: K, EZ)



SCHEMATIC DIAGRAM-2 (MAIN 2/2: K, EZ)



A MAIN C.B<HR>

TO CD MECHANISM
FC602
6 5 3 1
CN602

TO DECK2
CON301
3 1
TO CN301

TO DECK1
8 CON351 1
TO CN351

J940
MW LOOP

J831
ANTENNA

MW

FM 75Ω

J602
R
VIDEO AUX
L

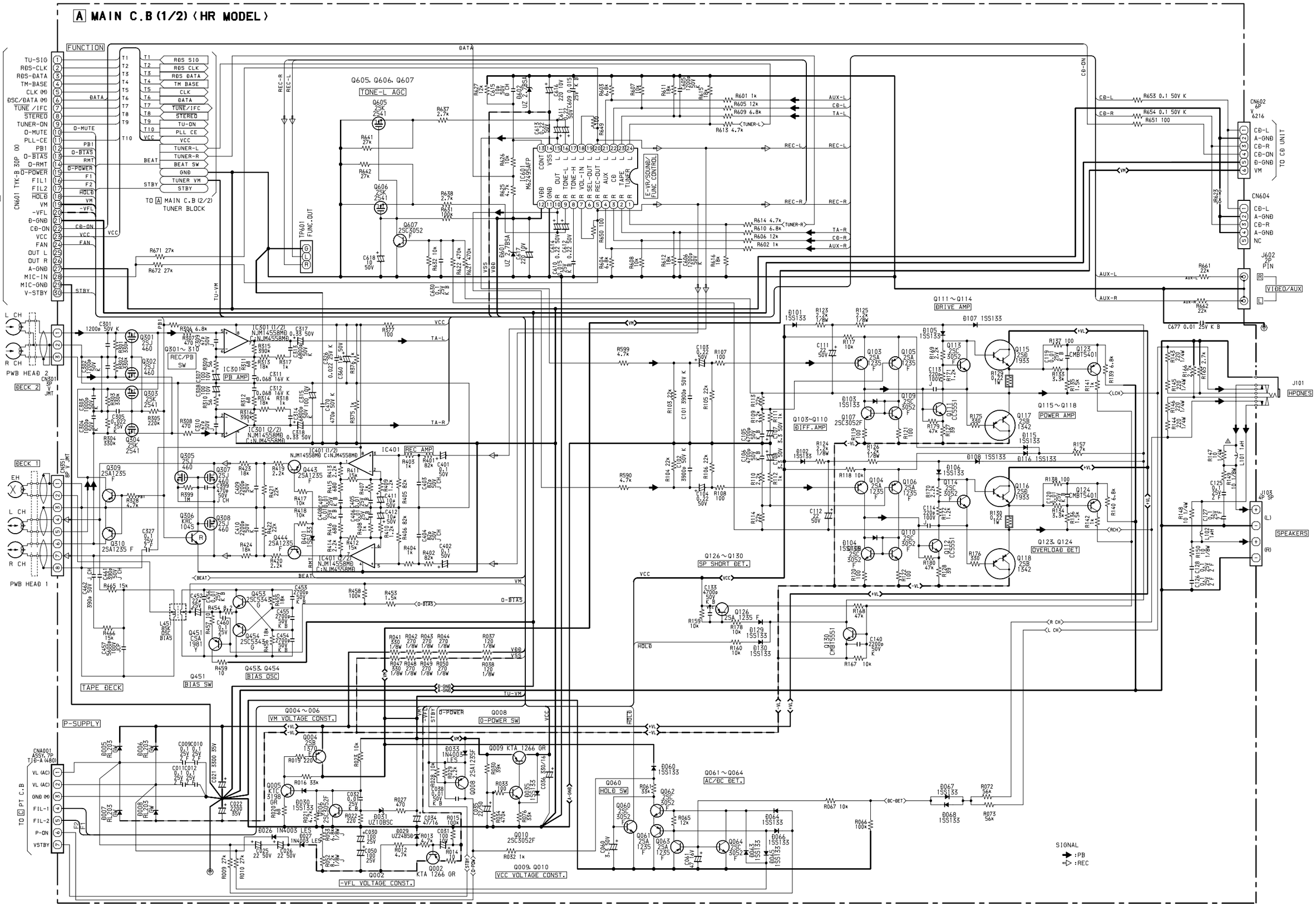
TO PT C.B
CNA001
1
7

J103
R L
SPEAKERS
1MP:6Ω

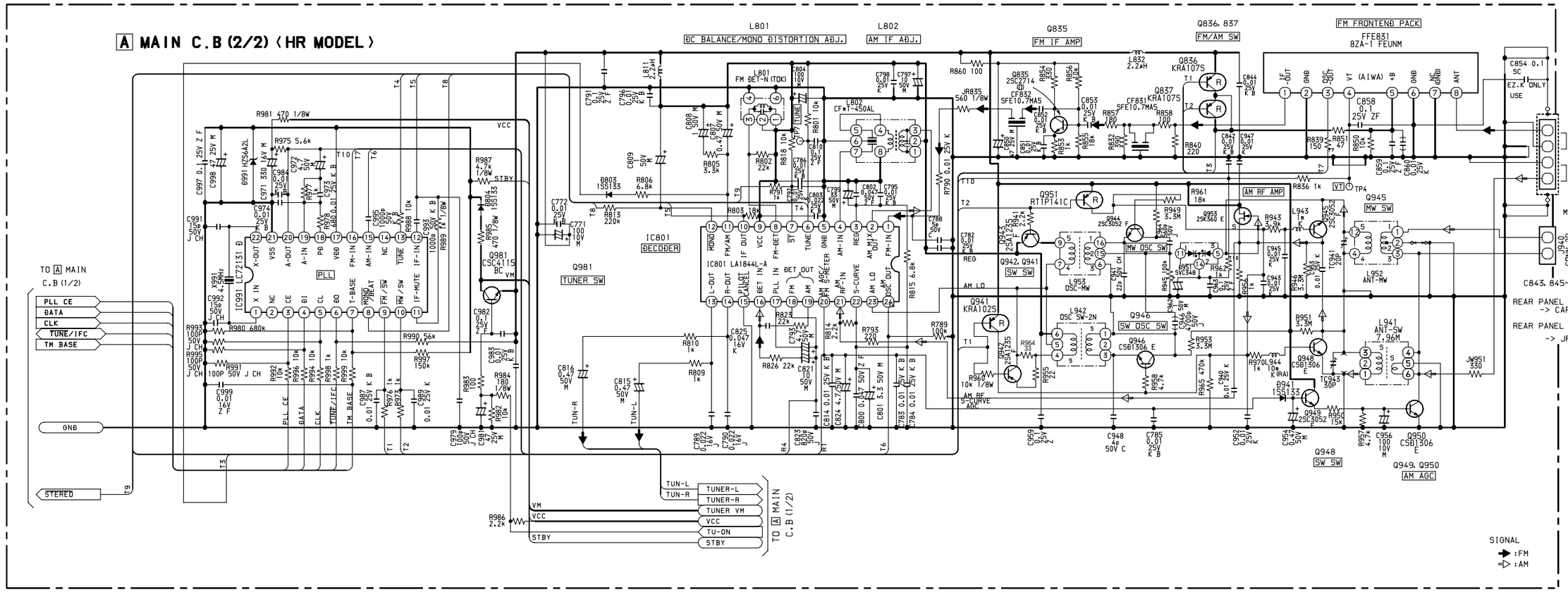
TO FRONT C.B
CN101
1
30

J101
PHONES

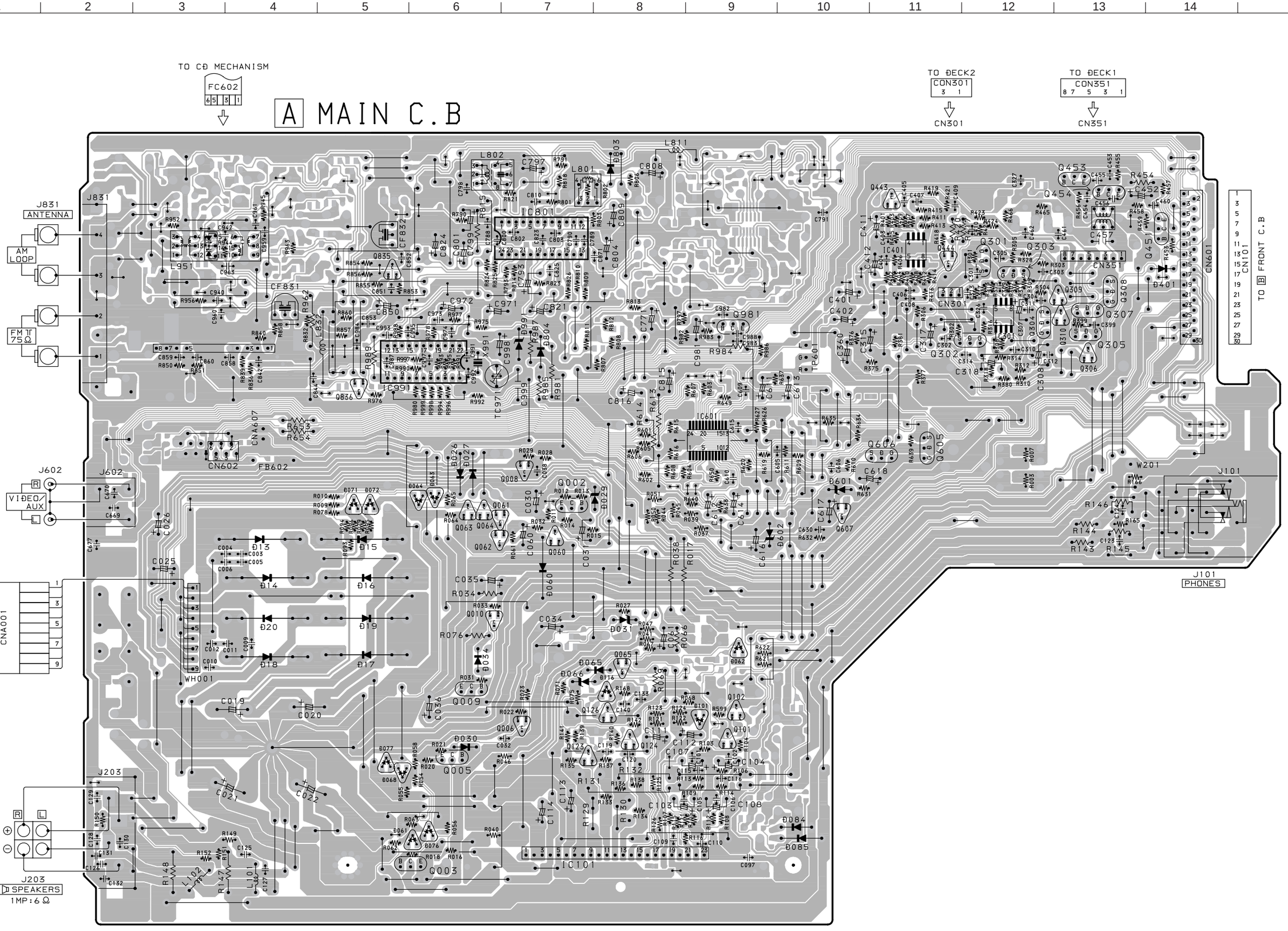
SCHEMATIC DIAGRAM-3 (MAIN 1/2: HR)



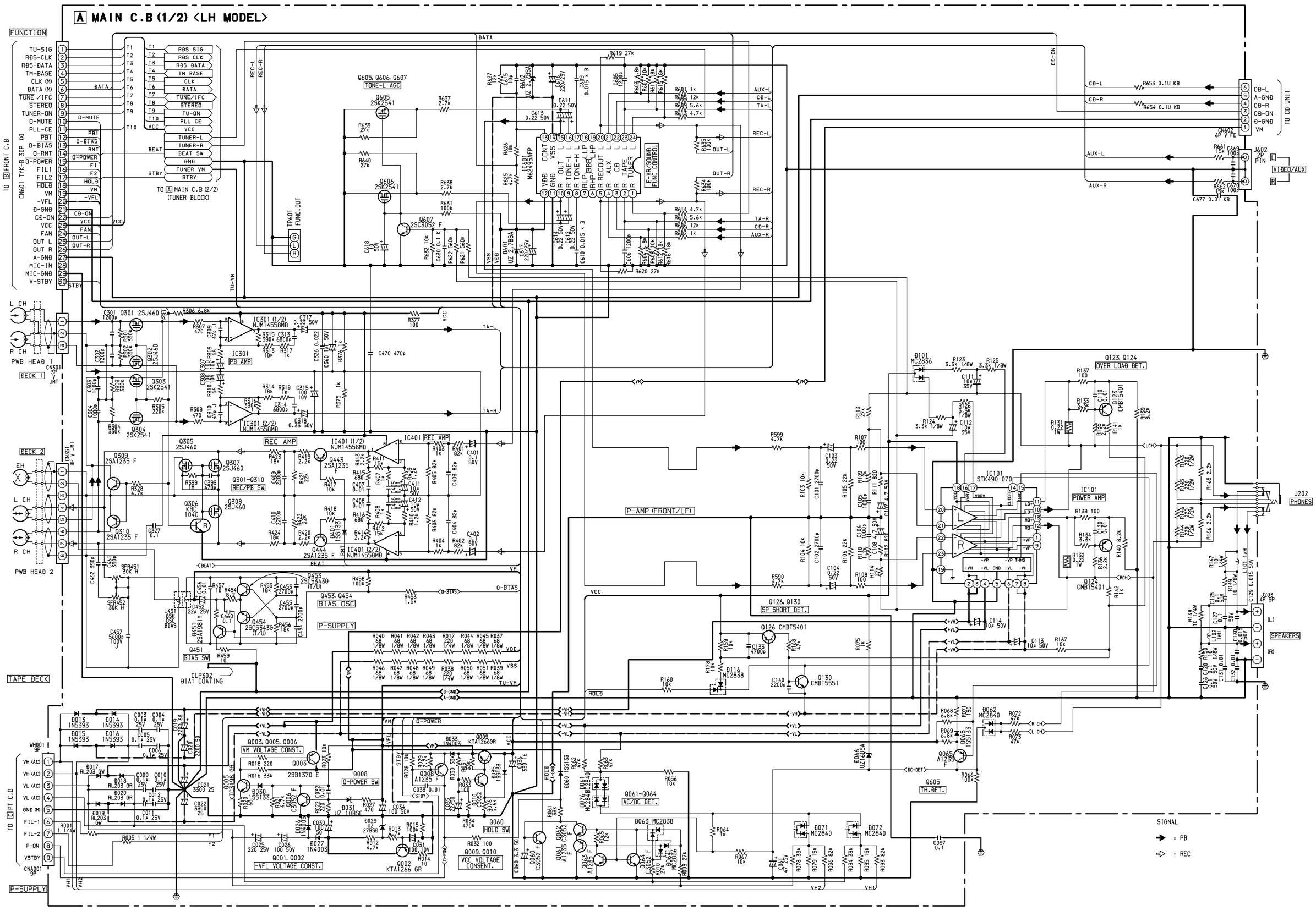
SCHEMATIC DIAGRAM-4 (MAIN 2/2: HR)



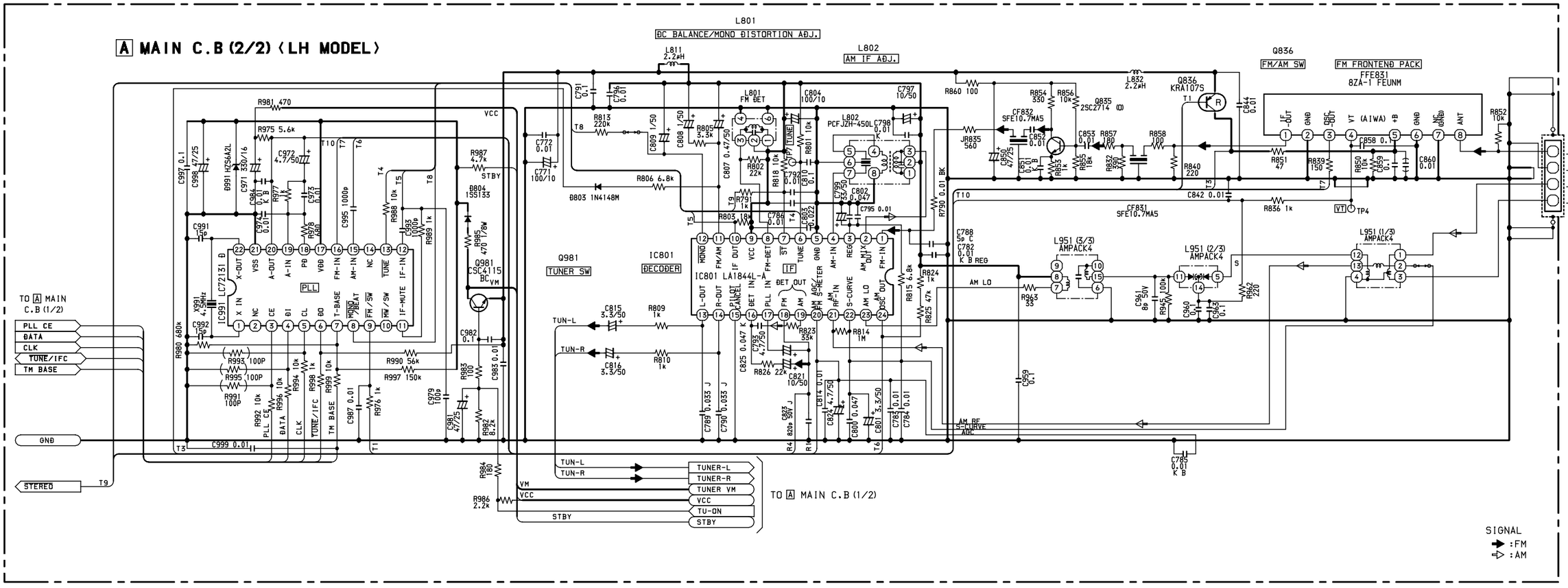
WIRING-3 (MAIN: LH)



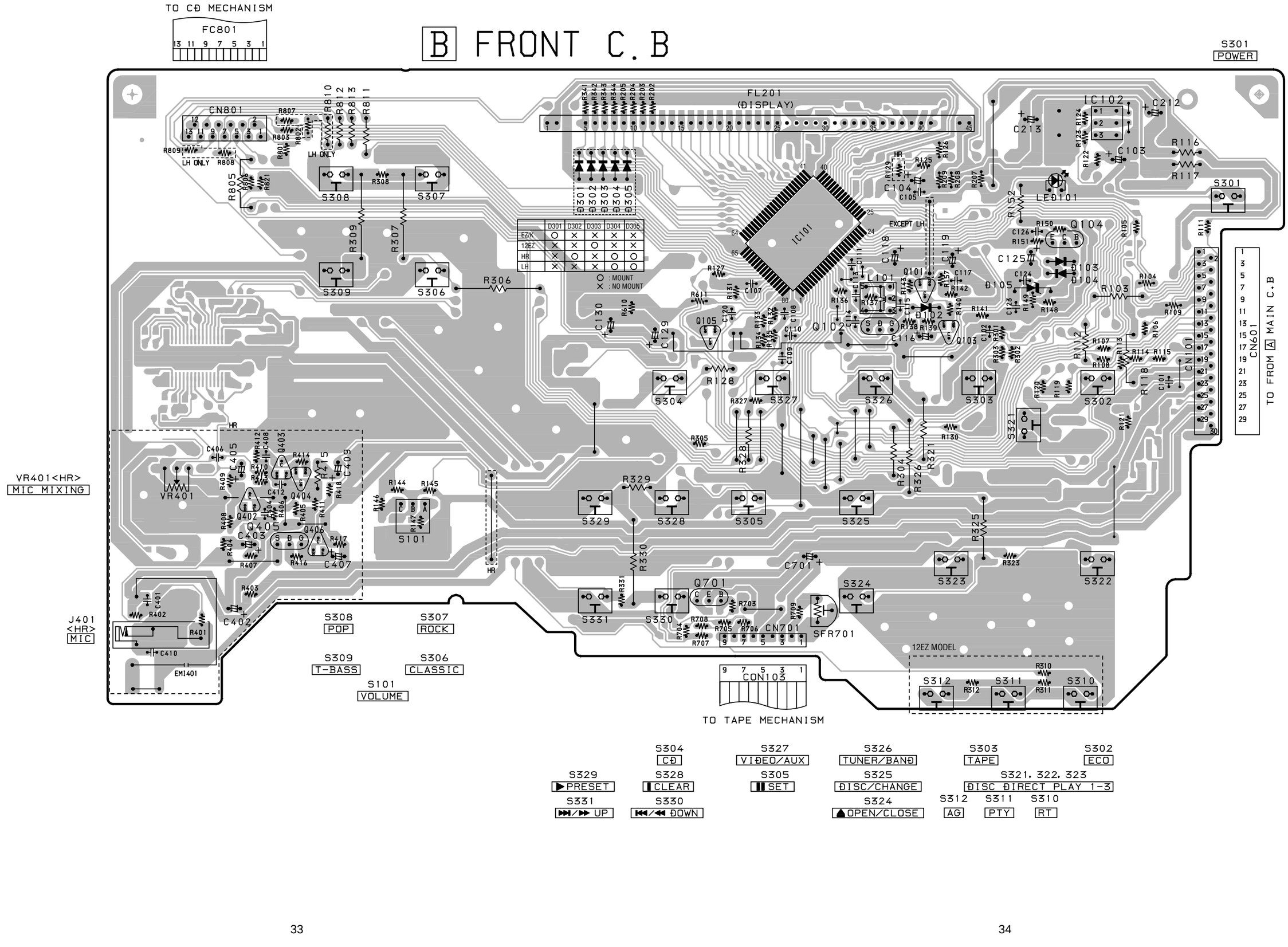
SCHEMATIC DIAGRAM-5 (MAIN 1/2: LH)



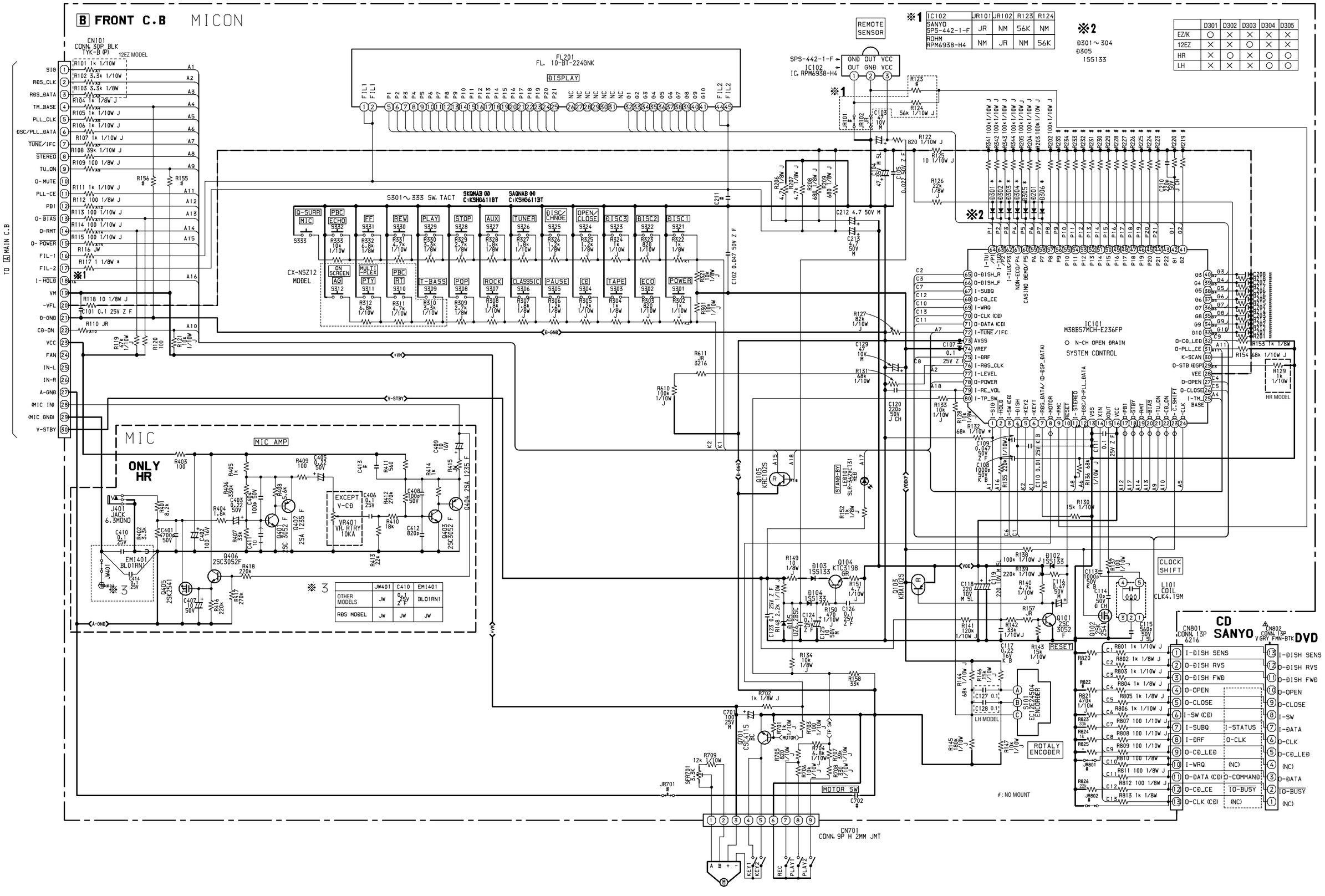
SCHEMATIC DIAGRAM-6 (MAIN 2/2: LH)

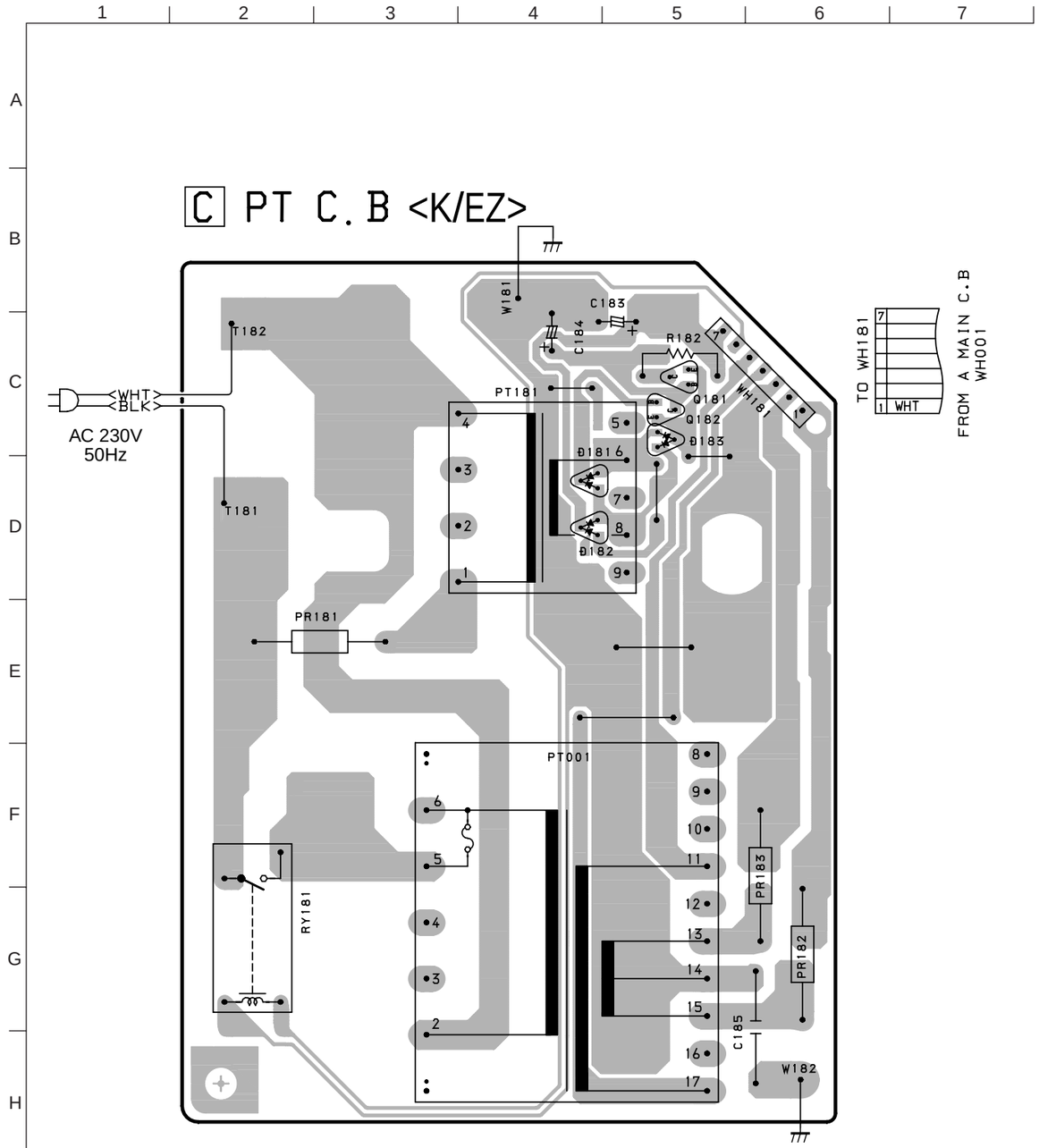


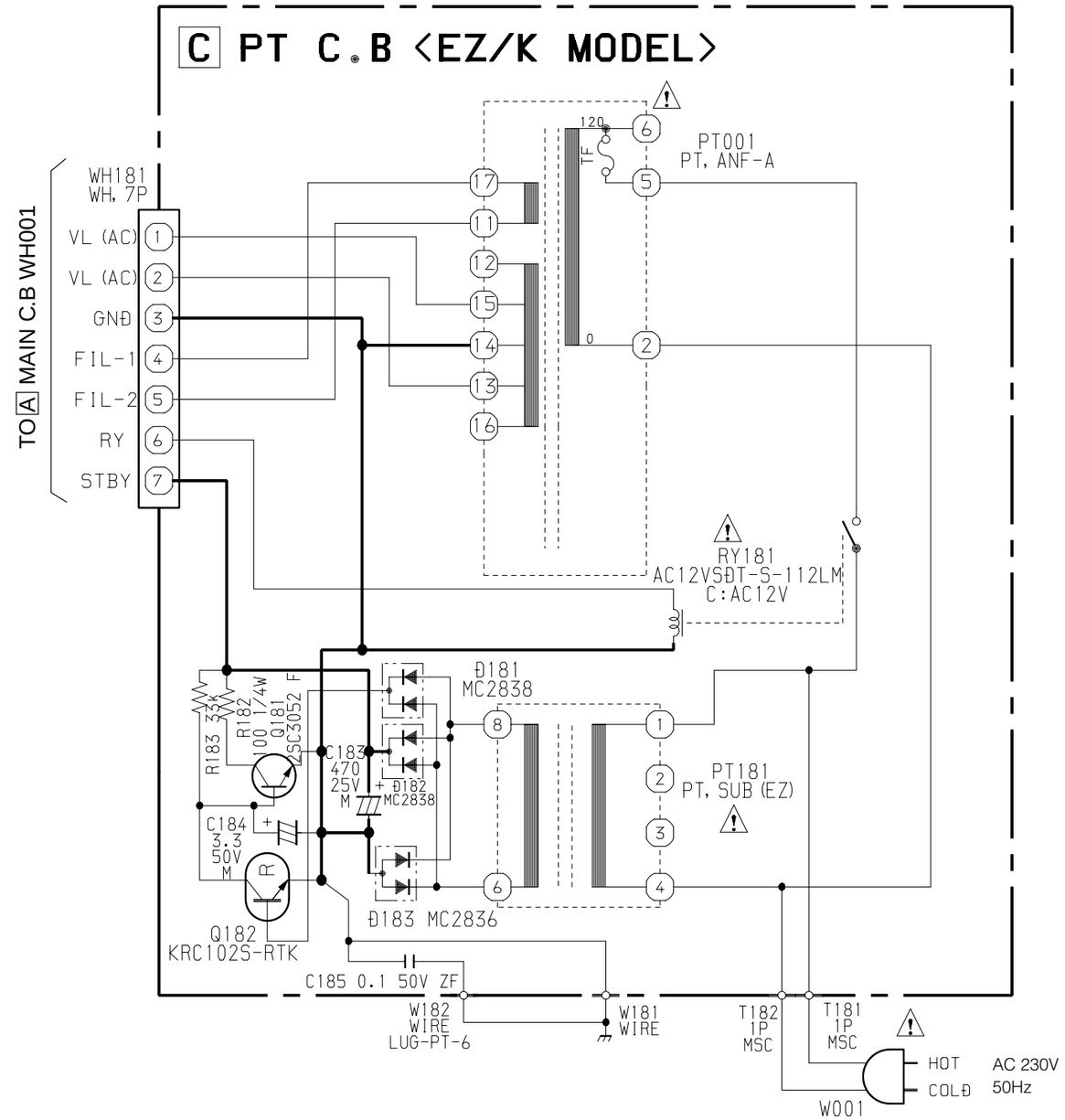
B FRONT C.B


TO CD MECHANISM
FC801
13 11 9 7 5 3 1
S301
POWER
CN801
FL201
(DISPLAY)
IC101
IC102
LED101
EXCEPT LH
LH ONLY
D301 D302 D303 D304 D305
EZ/K ○ × × × ×
12EZ × ○ × × ×
HR × × ○ × ×
LH × × × ○ ○
○ : MOUNT
× : NO MOUNT
S308 POP
S307 ROCK
S309 T-BASS
S306 CLASSIC
S101 VOLUME
VR401<HR>
MIC MIXING
J401
<HR>
MIC
EM1401
CN103
TO TAPE MECHANISM
SFR701
CN701
12EZ MODEL
CN601
TO FROM A MAIN C.B
S304 CD
S327 VIDEO/AUX
S326 TUNER/BAND
S303 TAPE
S302 ECO
S329 ▶PRESET
S328 ▌CLEAR
S305 ▌▌SET
S325 DISC/CHANGE
S321, 322, 323 DISC DIRECT PLAY 1-3
S331 ▶▶/▶▶ UP
S330 ◀◀/◀◀ DOWN
S324 ▲OPEN/CLOSE
S312 AG
S311 PTY
S310 RT

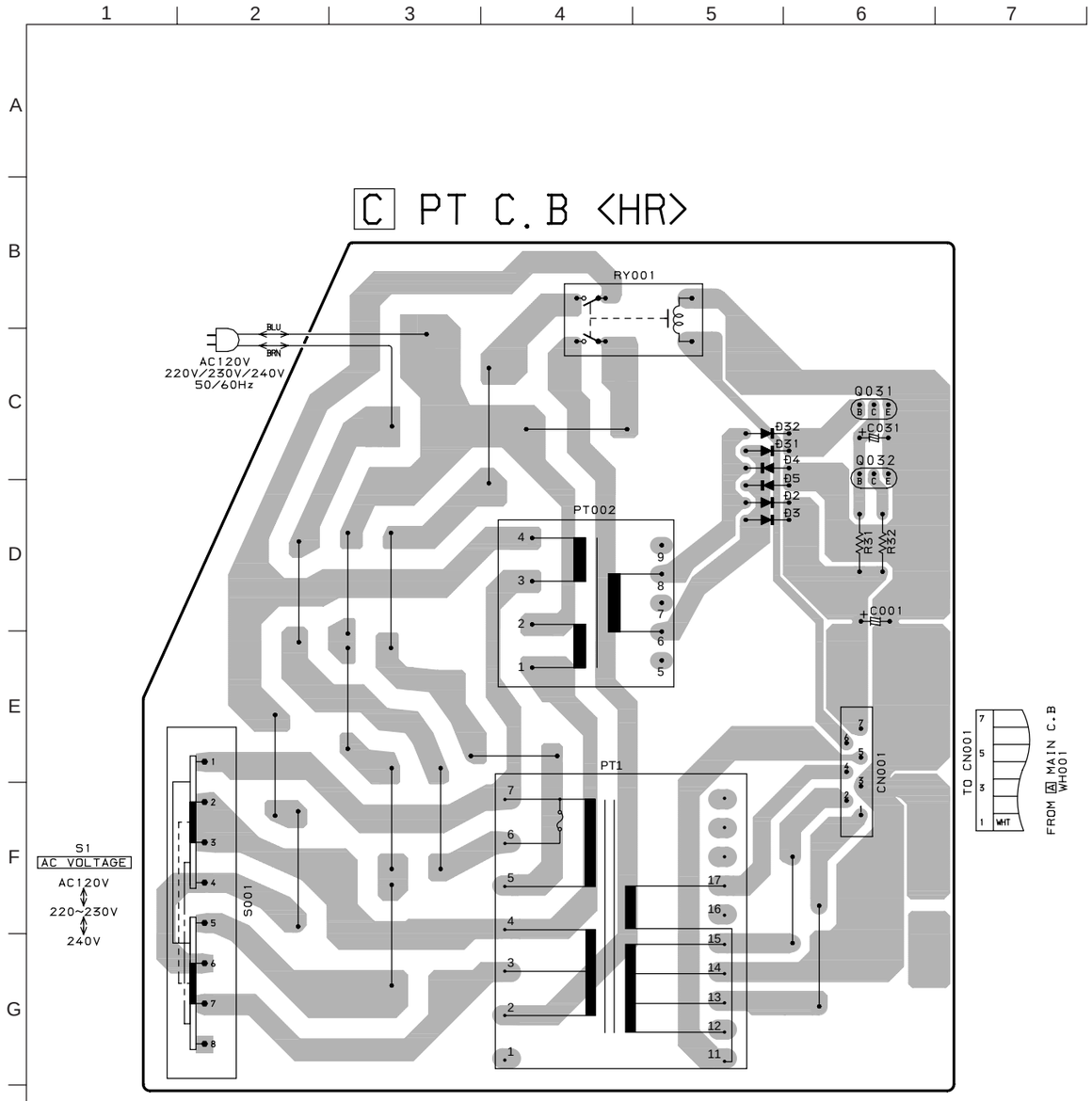
SCHEMATIC DIAGRAM-7 (FRONT)



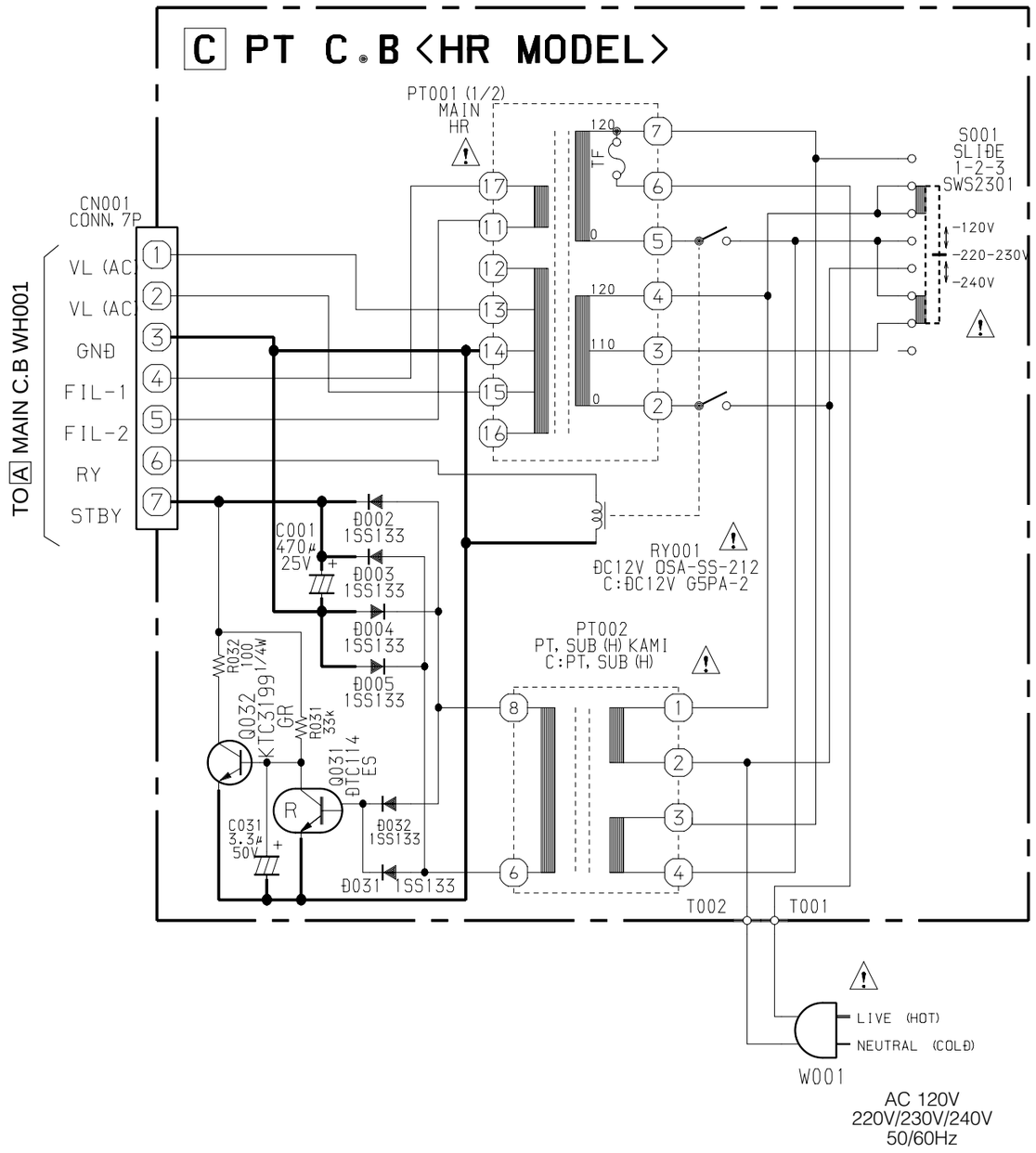

C PT C.B <K/EZ>
1 2 3 4 5 6 7
A B C D E F G H I J K
T182
T181
W181
C183
C184
R182
PT181
Q181
Q182
Đ183
Đ1816
Đ182
WH181
TO WH181
7
1 WHT
FROM A MAIN C.B
WH001
<WHT>
<BLK>
AC 230V
50Hz
PR181
PT001
RY181
PR183
PR182
C185
W182


C PT C.B <EZ/K MODEL>
TO A MAIN C.B WH001
WH181
WH, 7P
VL (AC) 1
VL (AC) 2
GNĐ 3
FIL-1 4
FIL-2 5
RY 6
STBY 7
PT001
PT, ANF-A
120
0
TF
RY181
AC12VSĐT-S-112LM
C:AC12V
Đ181
MC2838
R183 33k
R182
100 1/4W
Q181
2SC3052 F
C183
470
25V
M
Đ182
MC2838
C184
3.3
50V
M
Q182
KRC102S-RTK
Đ183 MC2836
PT181
PT, SUB (EZ)
C185 0.1 50V ZF
W182
WIRE
LUG-PT-6
W181
WIRE
T182
1P
MSC
T181
1P
MSC
HOT
COLĐ
AC 230V
50Hz
W001

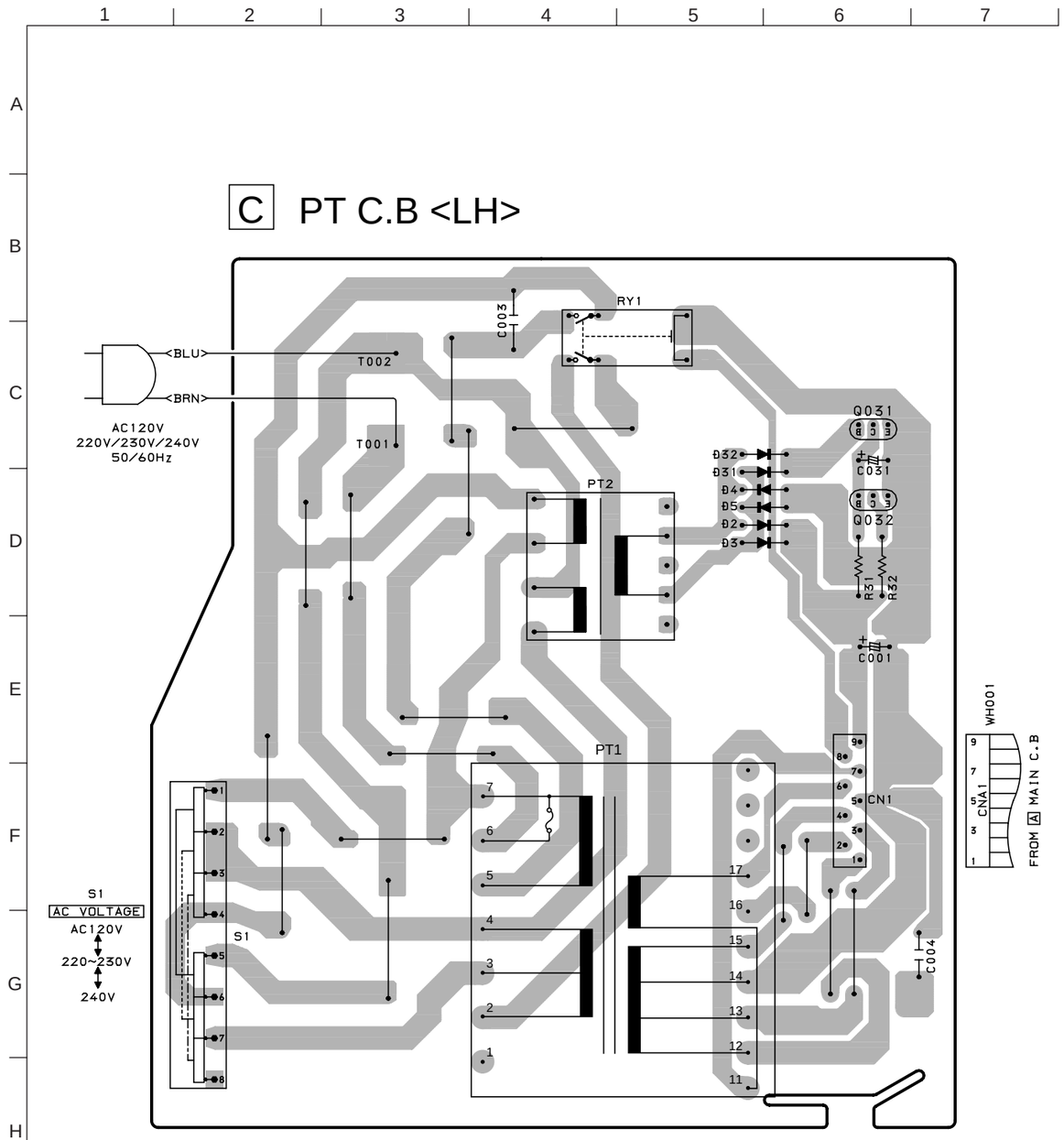
WIRING-6 (PT: HR)



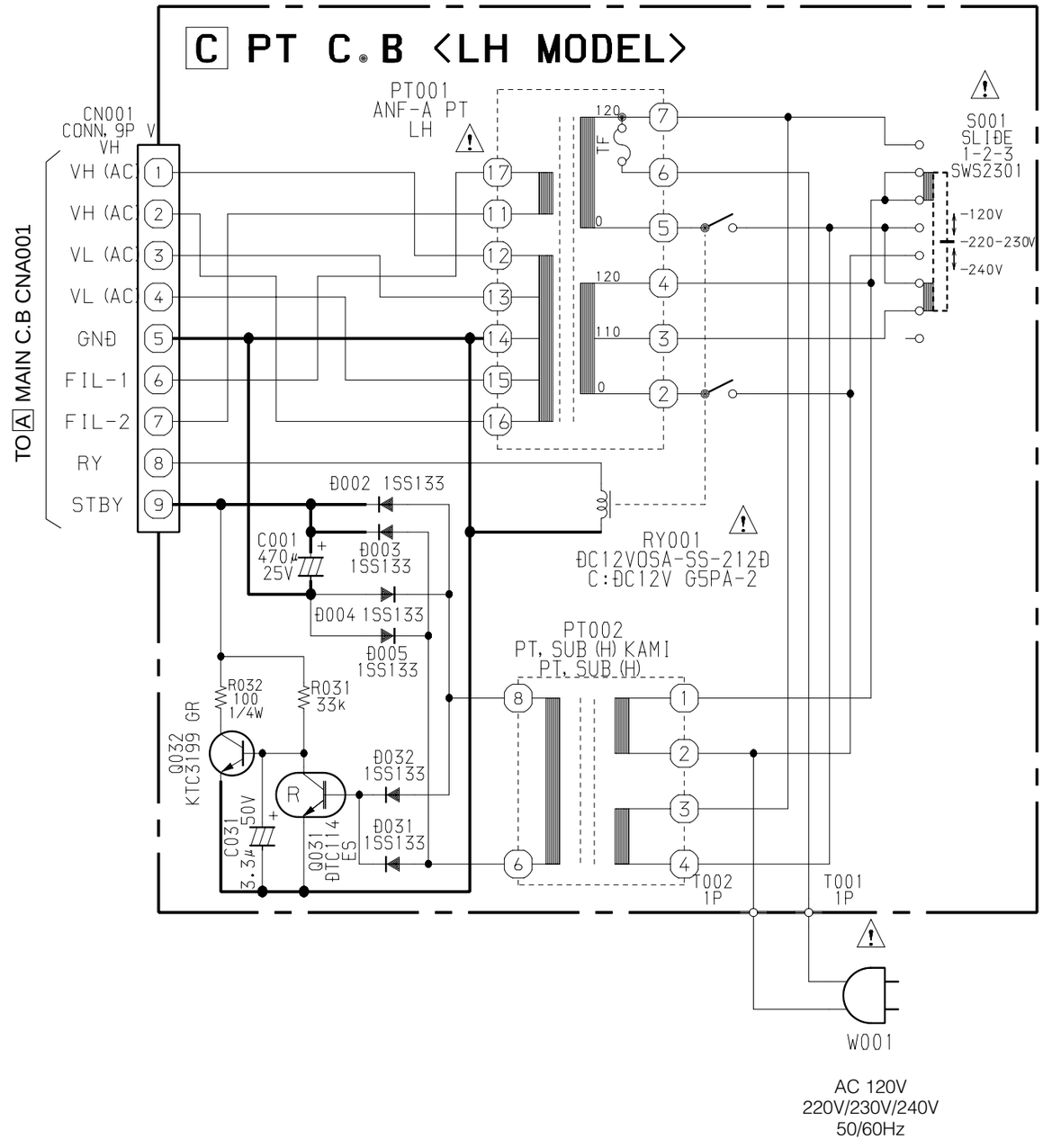
SCHEMATIC DIAGRAM-9 (PT: HR)



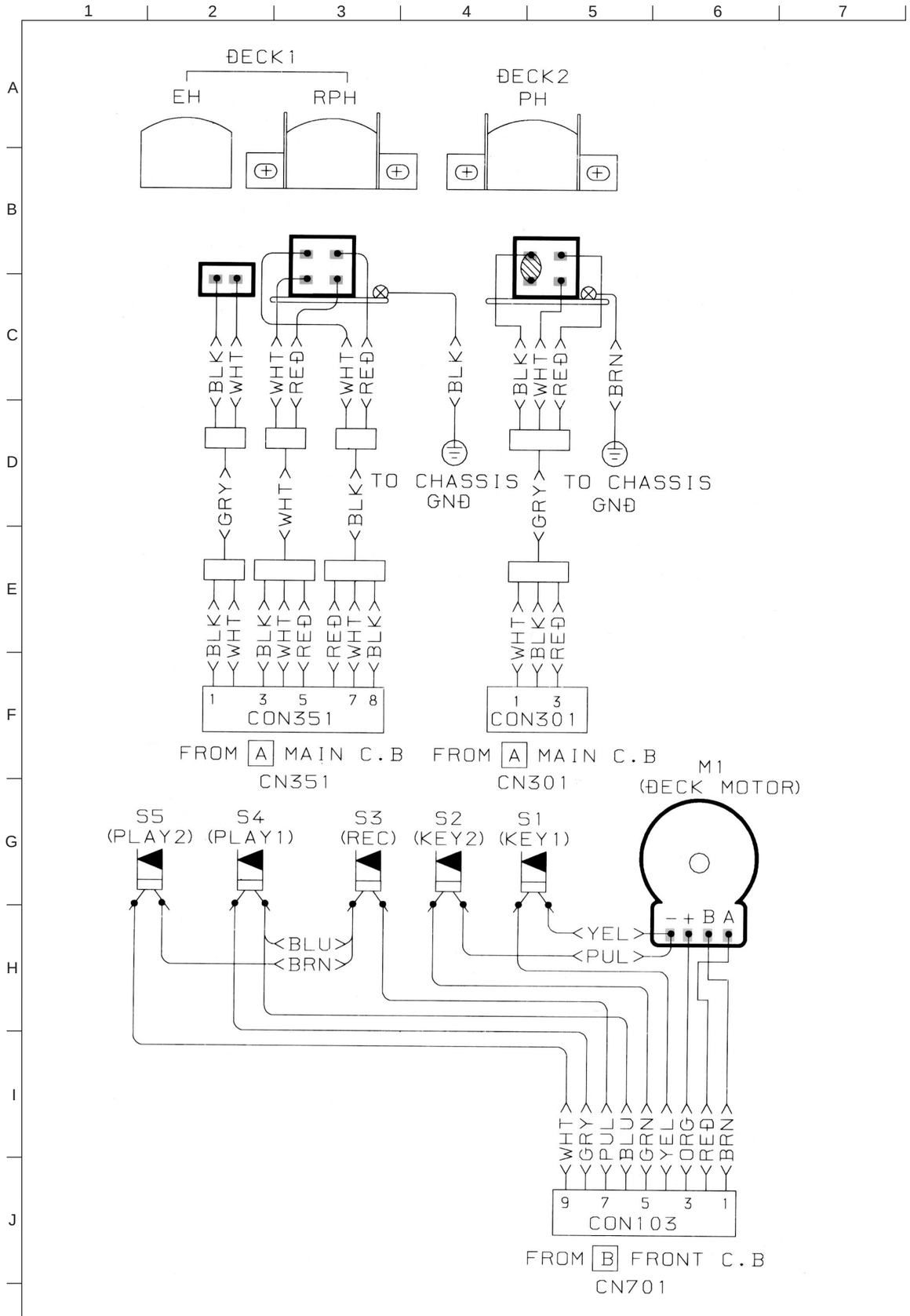
WIRING-7 (PT: LH)



SCHEMATIC DIAGRAM-10 (PT: LH)

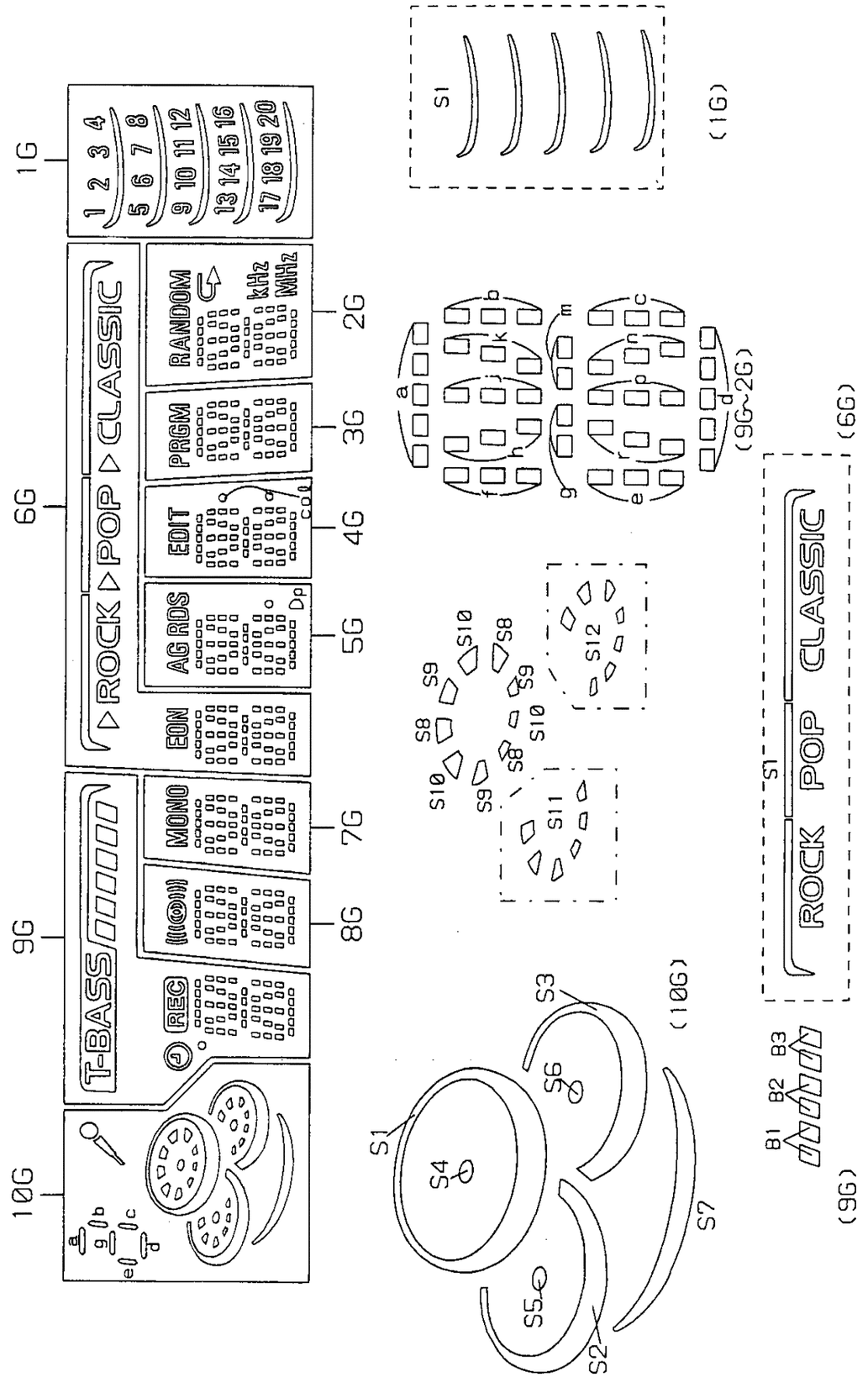


WIRING-8 (DECK)



FL (10-BT-224GNK) GRID ASSIGNMENT/ANODE CONNECTION

GRID ASSIGNMENT

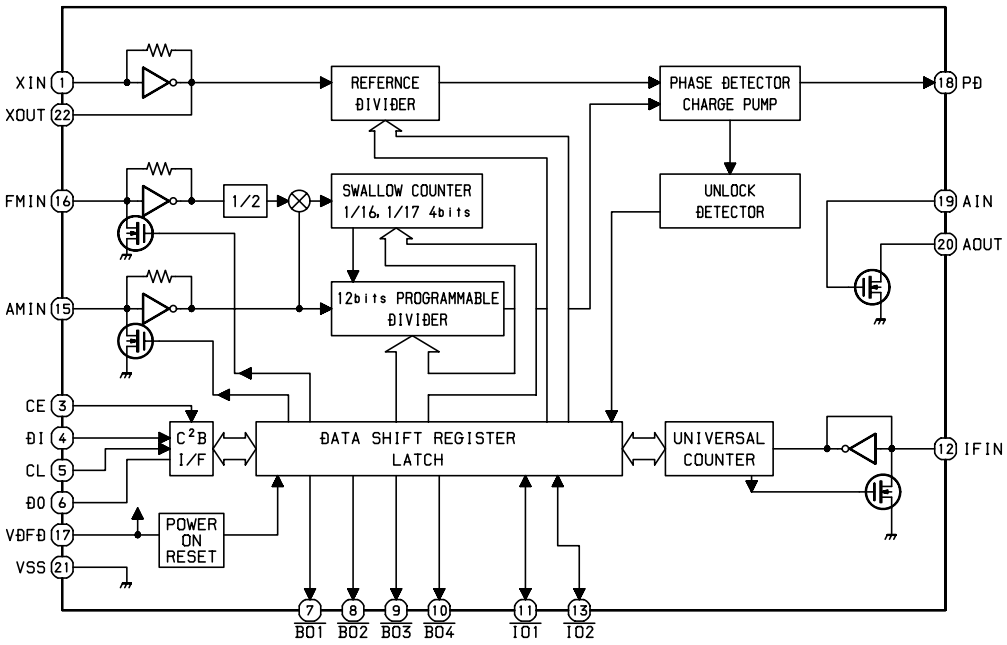


ANODE CONNECTION

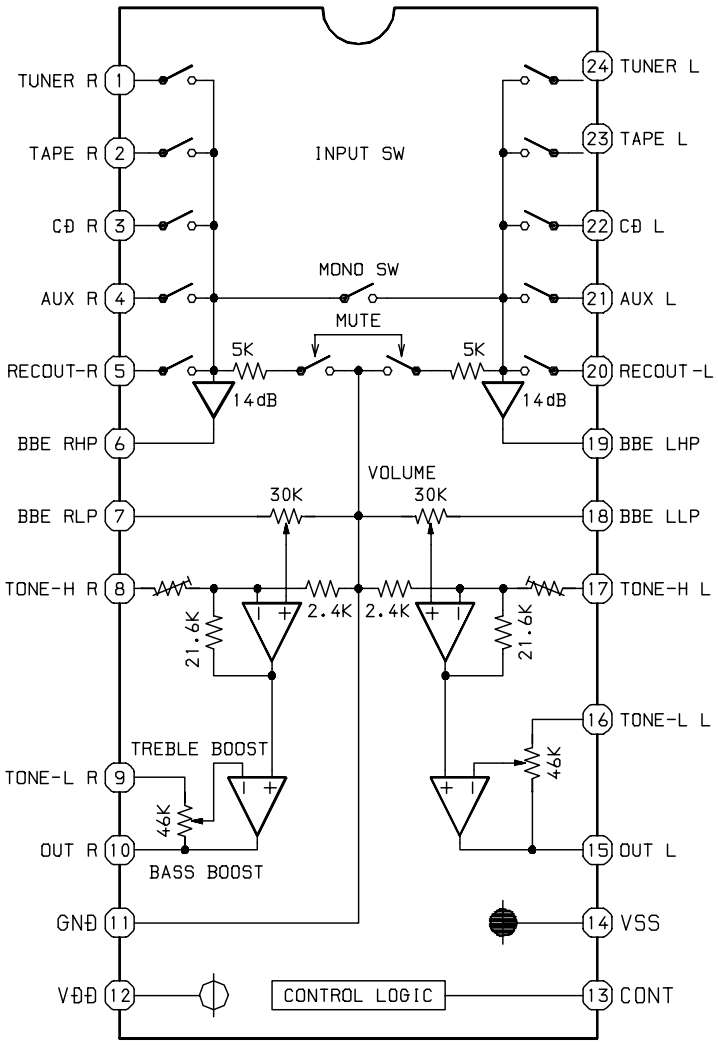
	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	–	d	d	d	d	d	d	d	d	20
P2	S7	n	n	n	n	n	n	n	n	19
P3	–	p	p	p	p	p	p	p	p	18
P4	S11	r	r	r	r	r	r	r	r	17
P5	S5	e	e	e	e	e	e	e	e	16
P6	S2	c	c	c	c	c	c	c	c	15
P7	S12	g	g	g	g	g	g	g	g	14
P8	S6	m	m	m	m	m	m	m	m	13
P9	S3	f	f	f	f	f	f	f	f	12
P10	S10	b	b	b	b	b	b	b	b	11
P11	S9	k	k	k	k	k	k	k	k	10
P12	S8	j	j	j	j	j	j	j	j	9
P13	S4	h	h	h	h	h	h	h	h	8
P14	S1	a	a	a	a	a	a	a	a	7
P15	–			MONO	EON	Dp	col (下)	–	MHz	6
P16	–	REC	–	–	–	AG	col (上)	–	kHz	5
P17			–	–	▷ (CLASSIC)	RDS	EDIT	PRGM		4
P18	a,d,g	T-BASS	–	–	▷ (ROCK)	–	–	–	–	3
P19	b	B1	–	–	▷ (POP)	–	–	–	–	2
P20	c	B2	–	–	S1	–	–	–	RANDOM	1
P21	e	B3	–	–	–	–	–	–	–	S1

IC BLOCK DIAGRAM

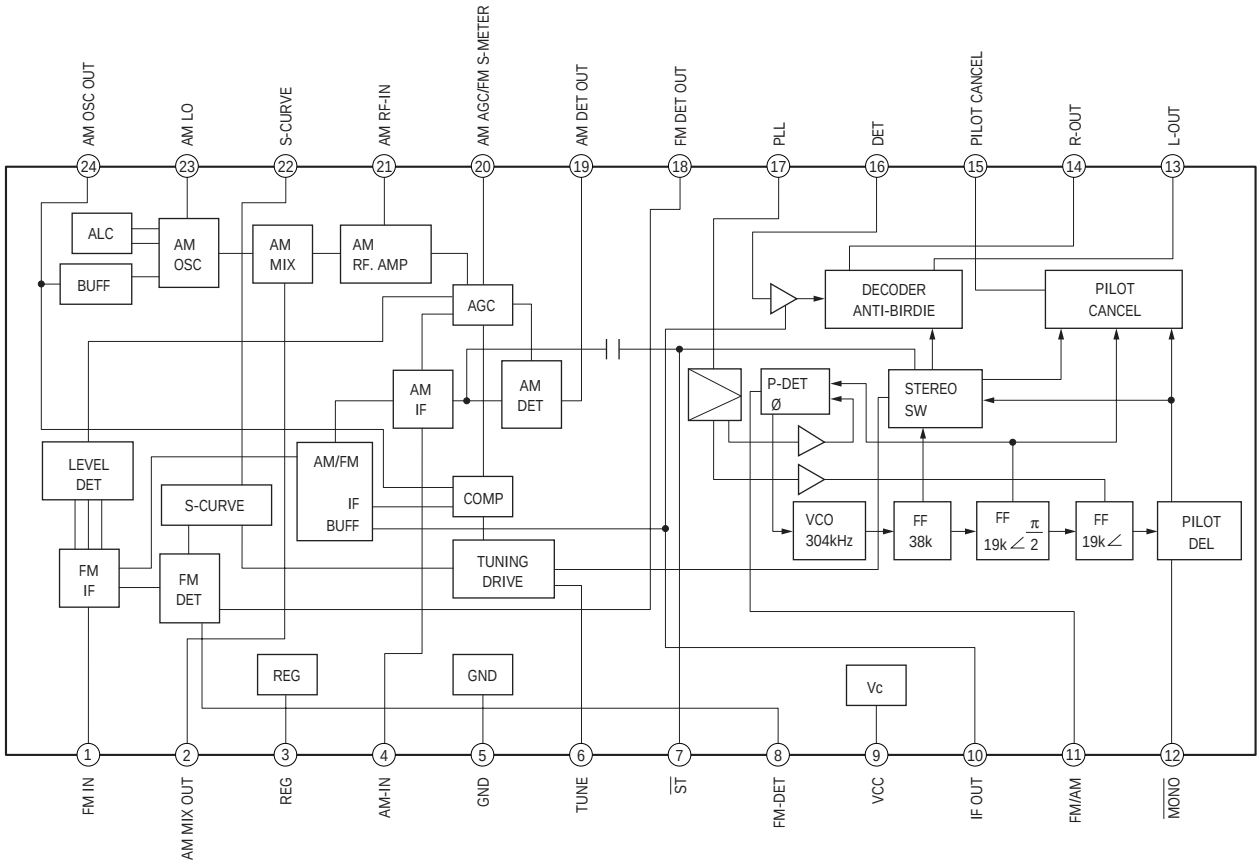
IC, LC72131D



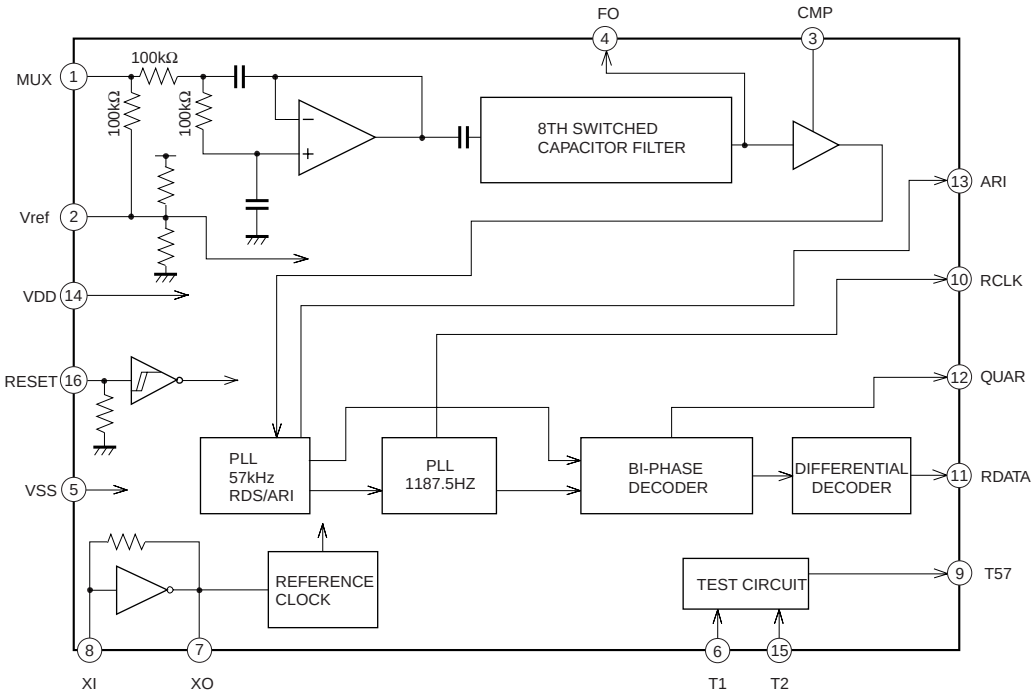
IC, M62495AFP



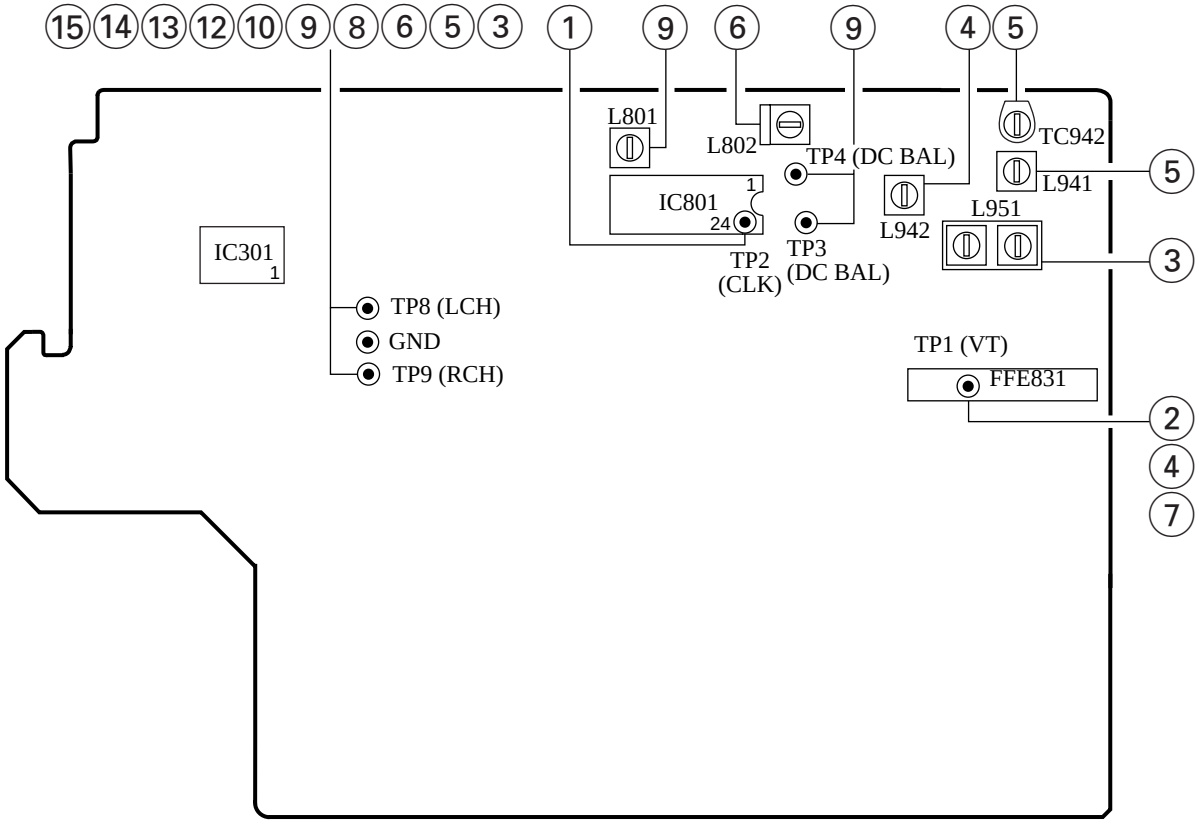
IC, LA1843/LA1844L-A



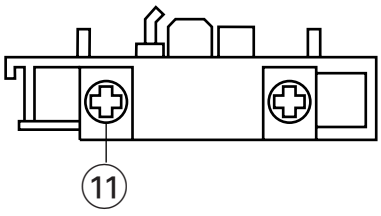
IC, BU1920FS



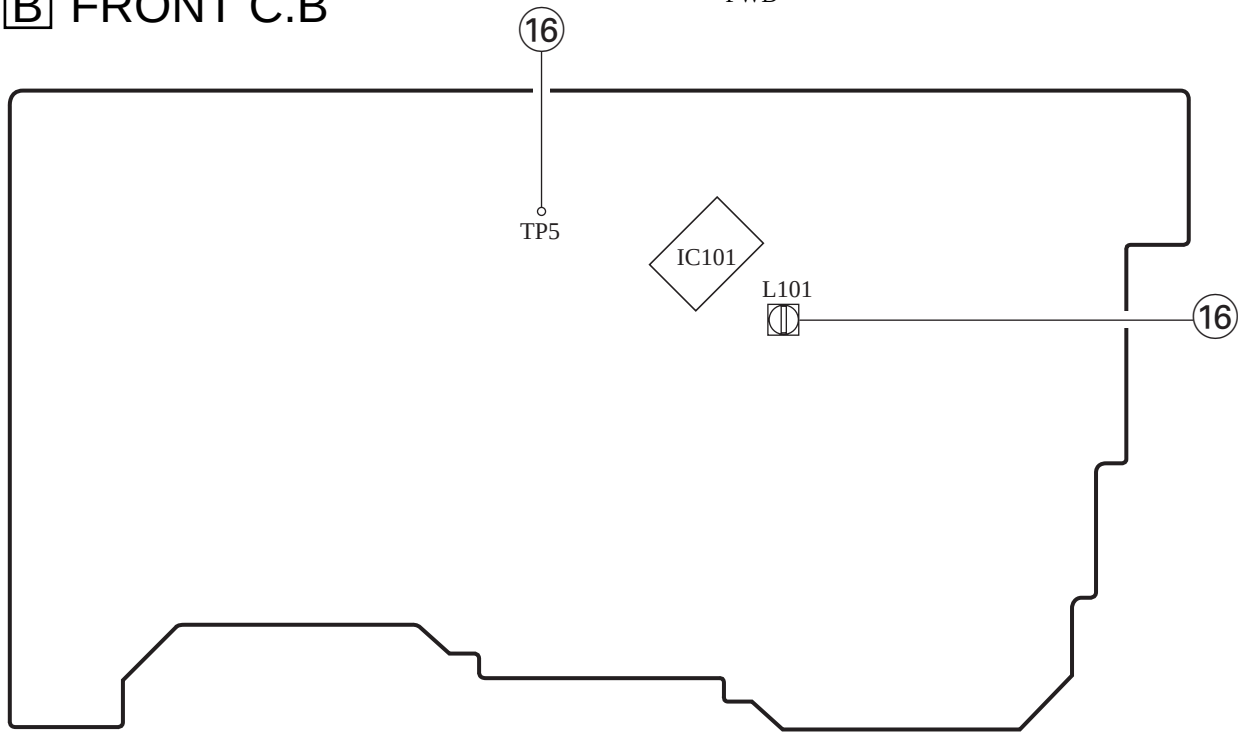
A MAIN C.B



DECK–1 R/P/E, DECK-2 P HEAD



B FRONT C.B



< TUNER SECTION >

1. Clock Frequency Check
   Settings: • Test point: TP2 (CLK)
   Method: Set to MW 1602kHz and check that the test point is 2052kHz±45Hz.

2. MW VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to MW 1602kHz and check that the test point is less than 8.0V. Then set to MW 531kHz and check that the test point is more than 0.6V.

3. MW Tracking Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location: L951 (1/3)
   Method: Set to MW 999kHz and adjust L951 (1/3) so that the test point becomes maximum.

4. LW VT Adjustment
   Settings: • Test point: TP1 (VT)
   • Adjustment location: L942
   Method: Set to LW 144kHz and adjust L942 so that the test point becomes 1.3V±0.05V.
   Then set to LW 290kHz and check that the test point is less than 8.0V.

5. LW Tracking Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location:
   L941 ..... 144kHz
   TC942 ..... 290kHz
   Method: Set up TC942 to center before adjustment.
   The level at 144kHz is adjusted to maximum by L941. Then the level at 290kHz is adjusted to maximum by TC942.

6. AM IF Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location:
   L802 ..... 450kHz

7. FM VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to FM 108.0MHz and check that the test point is less than 8.0V. Then set to FM 87.5MHz and check that the test point is more than 0.5V.

8. FM Tracking Check
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   Method: Set to FM 98.0MHz and check that the test point is less than 13dBµV.

9. DC Balance/Mono Distortion Adjustment
   Settings: • Test point: TP3, TP4 (DC balance)
   TP8 (Lch), TP9 (Rch) (Distortion)
   • Adjustment location: L801
   • Input level: 60dBµV
   Method: Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V±0.04V.
   Next, check that the distortion is less than 1.3%.

< DECK SECTION >

10. Tape Speed Adjustment (DECK 1)
    Settings: • Test tape: TTA-100
    • Test point: TP8 (Lch), TP9 (Rch)
    • Adjustment location: SFR701
    Method: Play back the test tape and adjust SFR701 so that the frequency counter reads 3000Hz±5Hz.

11. Head Azimuth Adjustment (DECK 1, DECK 2)
    Settings: • Test tape: TTA-330
    • Test point: TP8 (Lch), TP9 (Rch)
    • Adjustment location: Head azimuth adjustment screw
    Method: Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.
    Next, perform on REV PLAY mode.

12. PB Frequency Response Check (DECK 1, DECK 2)
    Settings: • Test tape: TTA-330
    • Test point: TP8 (Lch), TP9 (Rch)
    Method: Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 4dB.

13. PB Sensitivity Check (DECK 1, DECK 2)
    Settings: • Test tape: TTA-200
    • Test point: TP8 (Lch), TP9 (Rch)
    Method: Play back the test tape and check that the output level of the test point is 110mV±3.5dB.

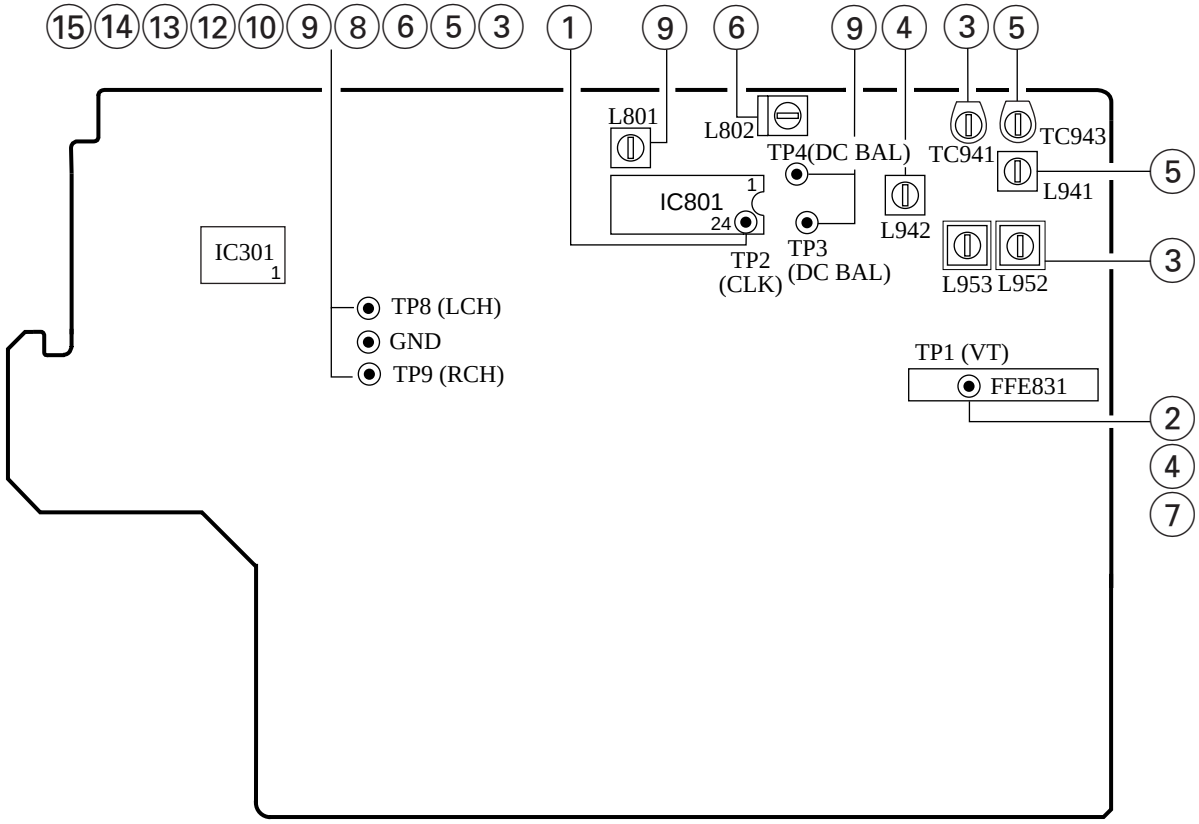
14. REC/PB Frequency Response Check (DECK 1)
    Settings: • Test tape: TTA-602
    • Test point: TP8 (Lch), TP9 (Rch)
    • Input signal: 1kHz/8kHz (LINE IN)
    Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes -20VU. Record and play back the 1kHz and 8kHz signals and check that the output of the 8kHz signals is 0dB±5dB with respect to that of the 1kHz signal.

15. REC/PB Sensitivity Check (DECK 1)
    Settings: • Test tape: TTA-602
    • Test point: TP8 (Lch), TP9 (Rch)
    • Input signal: 1kHz (LINE IN)
    Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB±3.5dB.

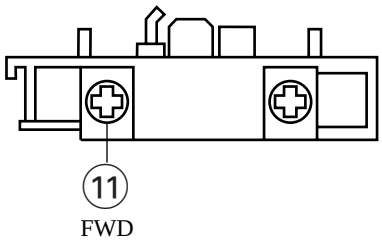
< FRONT SECTION >

16. u-CON OSC Adjustment
    Settings: • Test point: TP5
    • Adjustment location: L101
    Method: Insert AC plug with pressing of TUNER function key and POWER key. Adjust L101 so that the frequency across the test point is 58.350Hz±0.02Hz.

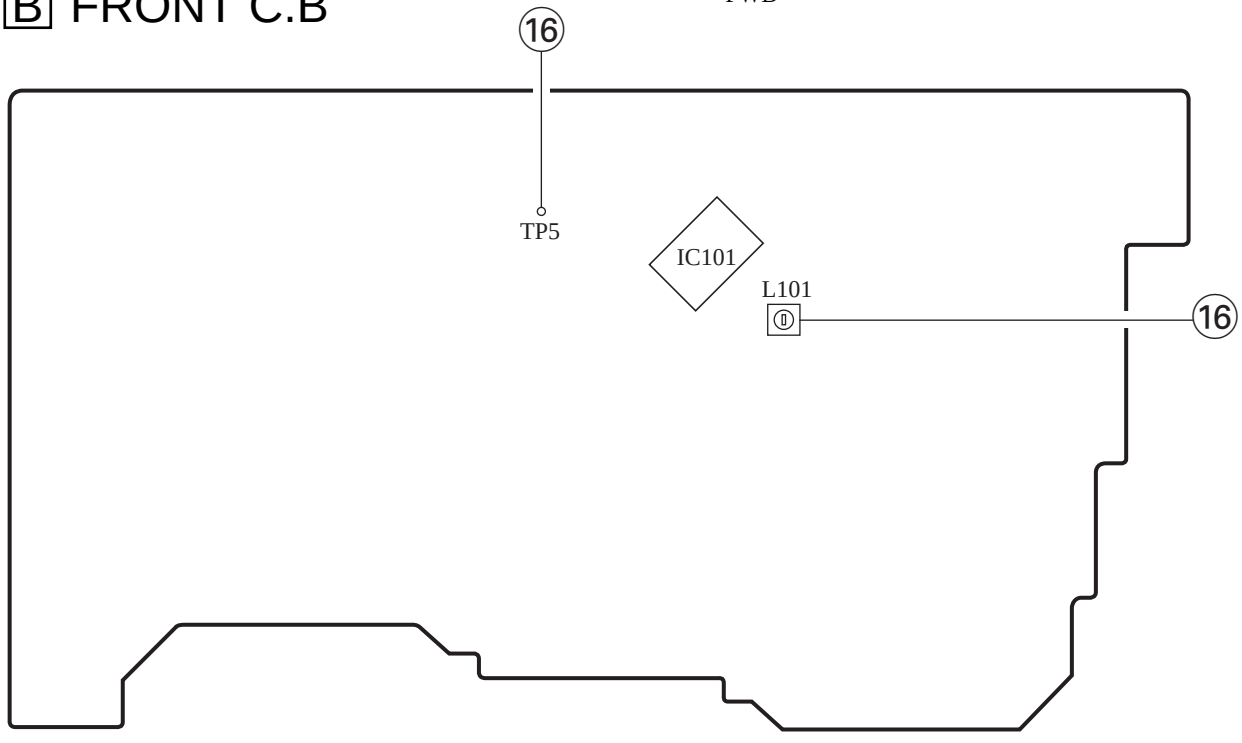
A MAIN C.B



DECK–1 R/P/E, DECK-2 P HEAD



B FRONT C.B



< TUNER SECTION >

1. Clock Frequency Check
   Settings: • Test point: TP2 (CLK)
   Method: Set to MW 1602kHz and check that the test point is 2052kHz±45Hz.

2. MW VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to MW 1602kHz and check that the test point is less than 8.0V. Then set to MW 531kHz and check that the test point is more than 0.6V.

3. MW Tracking Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location:
   L952 ..... 603kHz
   TC941 ..... 1404kHz
   Method: Set up TC941 to center before adjustment. The level at 603kHz is adjusted to maximum by L952. Then the level at 1404kHz is adjusted to maximum by TC941.

4. SW VT Adjustment
   Settings: • Test point: TP1 (VT)
   • Adjustment location: L942
   Method: Set to SW 5.73MHz and adjust L942 so that the test point becomes 1.3V±0.05V.
   Then set to SW 17.9MHz and check that the test point is less than 8.0V.

5. SW Tracking Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location:
   L941 ..... 5.73kHz
   TC943 ..... 17.9kHz
   Method: Set up TC943 to center before adjustment. The level at 5.73kHz is adjusted to maximum by L941. Then the level at 17.9kHz is adjusted to maximum by TC943.

6. AM IF Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location:
   L802 ..... 450kHz

7. FM VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to FM 108.0MHz and check that the test point is less than 8.0V. Then set to FM 87.5MHz and check that the test point is more than 0.5V.

8. FM Tracking Check
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   Method: Set to FM 98.0MHz and check that the test point is less than 9dBµV.

9. DC Balance/Mono Distortion Adjustment
   Settings: • Test point: TP3, TP4 (DC balance)
   TP8 (Lch), TP9 (Rch) (Distortion)
   • Adjustment location: L801
   • Input level: 60dBµV
   Method: Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V±0.04V.
   Next, check that the distortion is less than 1.2%.

< DECK SECTION >

10. Tape Speed Adjustment (DECK 1)
    Settings: • Test tape: TTA-100
    • Test point: TP8 (Lch), TP9 (Rch)
    • Adjustment location: SFR701
    Method: Play back the test tape and adjust SFR701 so that the frequency counter reads 3000Hz±5Hz.

11. Head Azimuth Adjustment (DECK 1, DECK 2)
    Settings: • Test tape: TTA-330
    • Test point: TP8 (Lch), TP9 (Rch)
    • Adjustment location: Head azimuth adjustment screw
    Method: Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.
    Next, perform on REV PLAY mode.

12. PB Frequency Response Check (DECK 1, DECK 2)
    Settings: • Test tape: TTA-330
    • Test point: TP8 (Lch), TP9 (Rch)
    Method: Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 4dB.

13. PB Sensitivity Check (DECK 1, DECK 2)
    Settings: • Test tape: TTA-200
    • Test point: TP8 (Lch), TP9 (Rch)
    Method: Play back the test tape and check that the output level of the test point is 110mV±3.5dB.

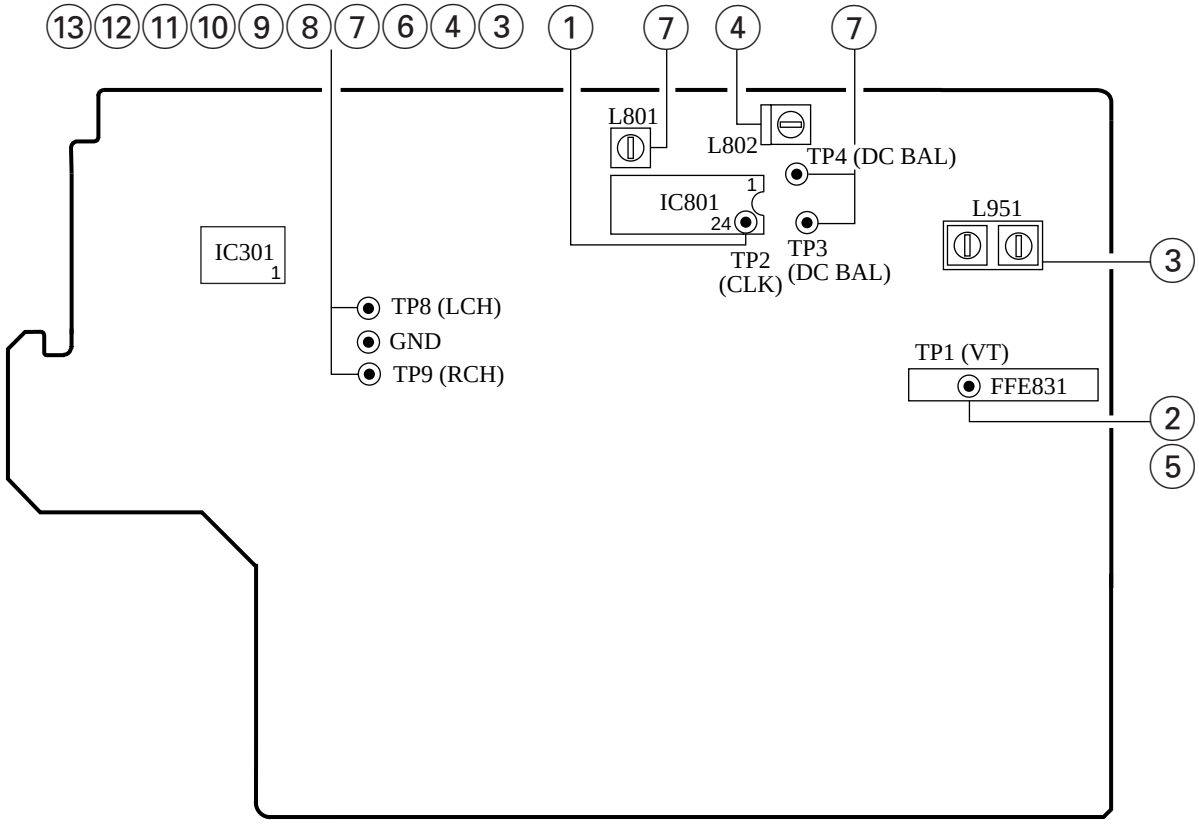
14. REC/PB Frequency Response Check (DECK 1)
    Settings: • Test tape: TTA-602
    • Test point: TP8 (Lch), TP9 (Rch)
    • Input signal: 1kHz/8kHz (LINE IN)
    Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes -20VU. Record and play back the 1kHz and 8kHz signals and check that the output of the 8kHz signals is 0dB±5dB with respect to that of the 1kHz signal.

15. REC/PB Sensitivity Check (DECK 1)
    Settings: • Test tape: TTA-602
    • Test point: TP8 (Lch), TP9 (Rch)
    • Input signal: 1kHz (LINE IN)
    Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB±3.5dB.

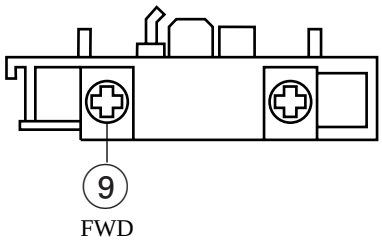
< FRONT SECTION >

16. u-CON OSC Adjustment
    Settings: • Test point: TP5
    • Adjustment location: L101
    Method: Insert AC plug with pressing of TUNER function key and POWER key. Adjust L101 so that the frequency across the test point is 58.350Hz±0.02Hz.

A MAIN C.B



DECK–1 R/P/E, DECK-2 P HEAD



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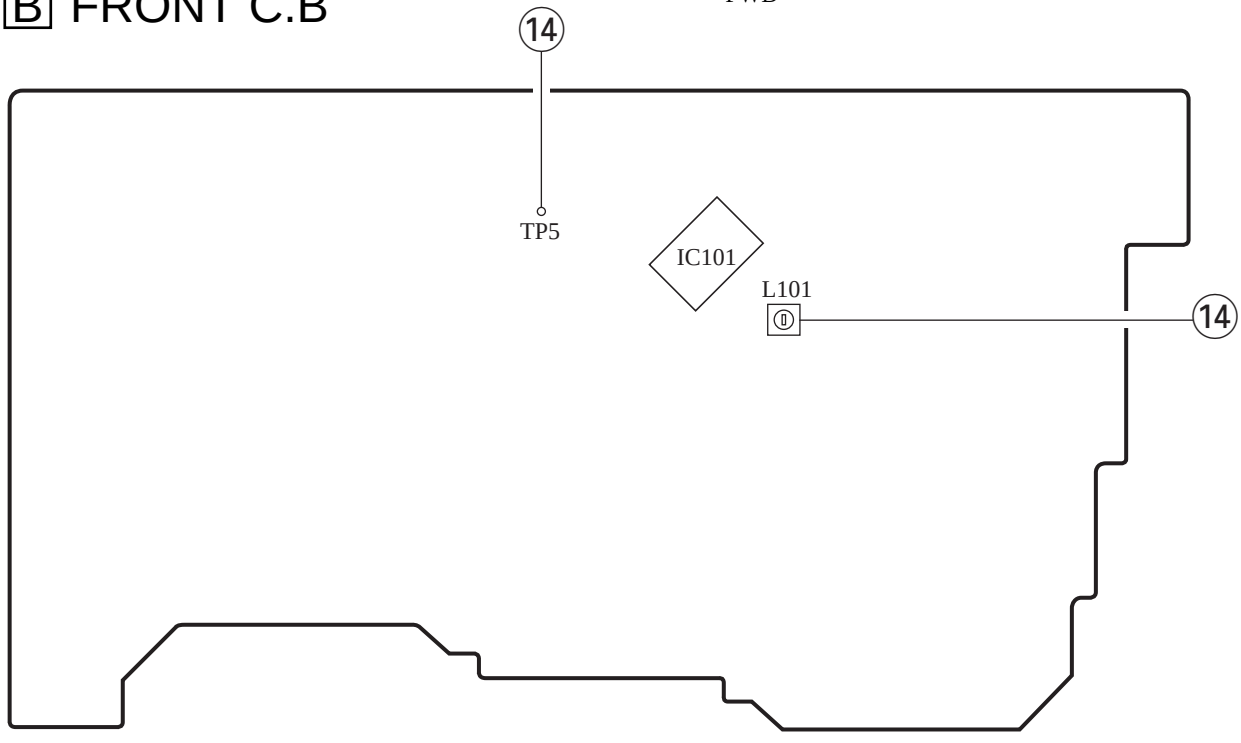


< TUNER SECTION >

1. Clock Frequency Check
   Settings: • Test point: TP2 (CLK)
   Method: Set to AM 1602kHz and check that the test point is 2052kHz±45Hz.

2. AM VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to AM 1602kHz and check that the test point is less than 8.0V. Then set to AM 531kHz and check that the test point is more than 0.6V.

3. AM Tracking Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location: L951 (1/3)
   Method: Set to MW 999kHz and adjust L951 (1/3) so that the test point becomes maximum.

4. AM IF Adjustment
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location:
   L802 ..... 450kHz

5. FM VT Check
   Settings: • Test point: TP1 (VT)
   Method: Set to FM 108.0MHz and check that the test point is less than 8.0V. Then set to FM 87.5MHz and check that the test point is more than 0.5V.

6. FM Tracking Check
   Settings: • Test point: TP8 (Lch), TP9 (Rch)
   Method: Set to FM 98.0MHz and check that the test point is less than 9dBµV (V model: 8dBµV).

7. DC Balance/Mono Distortion Adjustment
   Settings: • Test point: TP3, TP4 (DC balance)
   TP8 (Lch), TP9 (Rch) (Distortion)
   • Adjustment location: L801
   • Input level: 60dBµV
   Method: Set to FM 98.0MHz and adjust L801 so that the voltage between TP3 and TP4 becomes 0V±0.04V.
   Next, check that the distortion is less than 1.2%.

< DECK SECTION >

8. Tape Speed Adjustment (DECK 1)
   Settings: • Test tape: TTA-100
   • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location: SFR701
   Method: Play back the test tape and adjust SFR701 so that the frequency counter reads 3000Hz±5Hz.

9. Head Azimuth Adjustment (DECK 1, DECK 2)
   Settings: • Test tape: TTA-330
   • Test point: TP8 (Lch), TP9 (Rch)
   • Adjustment location: Head azimuth adjustment screw
   Method: Play back (FWD) the 8kHz signal of the test tape and adjust screw so that the output becomes maximum.
   Next, perform on REV PLAY mode.

10. PB Frequency Response Check (DECK 1, DECK 2)
    Settings: • Test tape: TTA-330
    • Test point: TP8 (Lch), TP9 (Rch)
    Method: Play back the 315Hz and 8kHz signals of the test tape and check that the output ratio of the 8kHz signal with respect to that of the 315Hz signal is within 4dB.

11. PB Sensitivity Check (DECK 1, DECK 2)
    Settings: • Test tape: TTA-200
    • Test point: TP8 (Lch), TP9 (Rch)
    Method: Play back the test tape and check that the output level of the test point is 110mV±3.5dB.

12. REC/PB Frequency Response Check (DECK 1)
    Settings: • Test tape: TTA-602
    • Test point: TP8 (Lch), TP9 (Rch)
    • Input signal: 1kHz/8kHz (LINE IN)
    Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at the test points becomes -20VU. Record and play back the 1kHz and 8kHz signals and check that the output of the 8kHz signals is 0dB±5dB with respect to that of the 1kHz signal.

13. REC/PB Sensitivity Check (DECK 1)
    Settings: • Test tape: TTA-602
    • Test point: TP8 (Lch), TP9 (Rch)
    • Input signal: 1kHz (LINE IN)
    Method: Apply a 1kHz signal and REC mode. Then adjust OSC attenuator so that the output level at TP8, TP9 becomes 0VU. Record and play back the 1kHz signals and check that the output is -2dB±3.5dB.

< FRONT SECTION >

14. u-CON OSC Adjustment
    Settings: • Test point: TP5
    • Adjustment location: L101
    Method: Insert AC plug with pressing of TUNER function key and POWER key. Adjust L101 so that the frequency across the test point is 58.350Hz±0.02Hz.

IC DESCRIPTION

IC, M38B57MCH-E236FP/M38B59MFH-E250FP

Pin No.	Pin Name	I/O	Description
1	I-SIG	I	RDS signal level A/D input. (Not used)
2	I-HOLD	I	Hold voltage level A/D input.
3	I-SW (CD)	I	CD mecha SW A/D input.
4	I-DISH	I	CD turn-table position check A/D input.
5	I-KEY2	I	KEY2 A/D input.
6	I-KEY1	I	KEY1 A/D input.
7	I-RDS-DATA/ (O-DSP_DATA)	I/O	RDS data input / DSP IC data (V-CD) output. (Not used) (O-DSP_DATA)
8	O-MOTOR	O	Deck motor supply ON/OFF output.
9	I-RMC	I	System remote control signal input. (“L”=ACTIVE)
10	RESET	I	System reset input. (“L”=RESET)
11	I-STERE	I	Tuner stereo input. (“L”=STEREO)
12	O-DSC/O-PLL_DATA	O	Function IC control & PLL data output.
13	VSS	—	GND.
14, 15	XIN, XOUT	I/O	4.19MHz system CLK input / output.
16	VCC	—	Power supply input.
17	O-PB1	O	Deck 1/2 switch output. (“L”=PLAYBACK DECK 1)
18	O-STBY	O	Standby LED ON/OFF output. (“L”=ON)
19	O-RMT	O	REC mute output. (“H”=MUTE)
20	O-BIAS	O	Record bias ON/OFF output. (“L”=ON)
21	O-TU_ON	O	Tuner supply ON/OFF output. (“H”=ON)
22	O-CD_ON	O	CD supply ON/OFF output. (“H”= ON)
23	O-C.SHIFT	O	MICON clock shift output. (“L”=SHIFT)
24	O-PLL-CLK	O	PLL IC CLK output.
25	I-TM_BASE	I	8 Hz time base input.
26	O-CLOSE	O	CD door close output.
27	O-CD-OPEN	O	CD door open output.
28	VEE	—	Power supply input for FL display.
29	O-STB(DSP)	O	DSP IC strobe output. (Not used)
30	K-SCAN	O	Initial key scan output.
31	O-PLL_CE	O	CD PLL IC chip enable output.
32	O-CD_LED	O	CD flash window LED output.
33-42	G10~G1	O	FL grid output (G10~G1).
43	P22	O	FL segment output (P22). (Not used)
44-58	P21-P7	O	FL segment output (P21~P7).
59	PHONO/P6	I/O	PHONO diode input / FL segment output (P6).
60	CASINO DEMO/P5	I/O	CASINO DEMO diode input (Not used) / FL segment output (P5).
61	NON-ECO/P4	I/O	ECO OFF diode input / FL segment output (P4).
62	I-TU3/P3	I/O	TU 3 diode input (Not used) / FL segment output (P3).
63	I-TU2/P2	I/O	TU 2 diode input (Not used) / FL segment output (P2).
64	I-TU1/P1	I/O	TU 1 diode input (Not used) / FL segment output (P1).

Pin No.	Pin Name	I/O	Description
65	O-DISH_R	O	CD turn-table reverse turn output.
66	O-DISH_F	O	CD turn-table forward turn output.
67	I-SUBQ	I	Sub code-Q data input.
68	O-CD_CE	O	CD DSP chip enable output.
69	I-WRQ	I	CD WRQ input.
70	O-CLK (CD)	O	CD control clock output .
71	O-DATA (CD)	O	CD control data output.
72	I-TUNE/IFC	I	Tuner SD input / IF count input.
73	AVSS	—	GND.
74	VREF	—	Reference voltage.
75	I-DRF	I	CD DRF input.
76	I-RDS_CLK	I	RDS clock input. (Not used)
77	I-LEVEL	I	Connected to GND through a resistor.
78	O-POWER	O	SYSTEM Power ON/OFF output. (“H”=ON)
79	I-RE_VOL	I	Rotary encoder A/D input.
80	I-TP_SW	I	Deck mecha SW A/D input.

MECHANICAL PARTS LIST 1/1

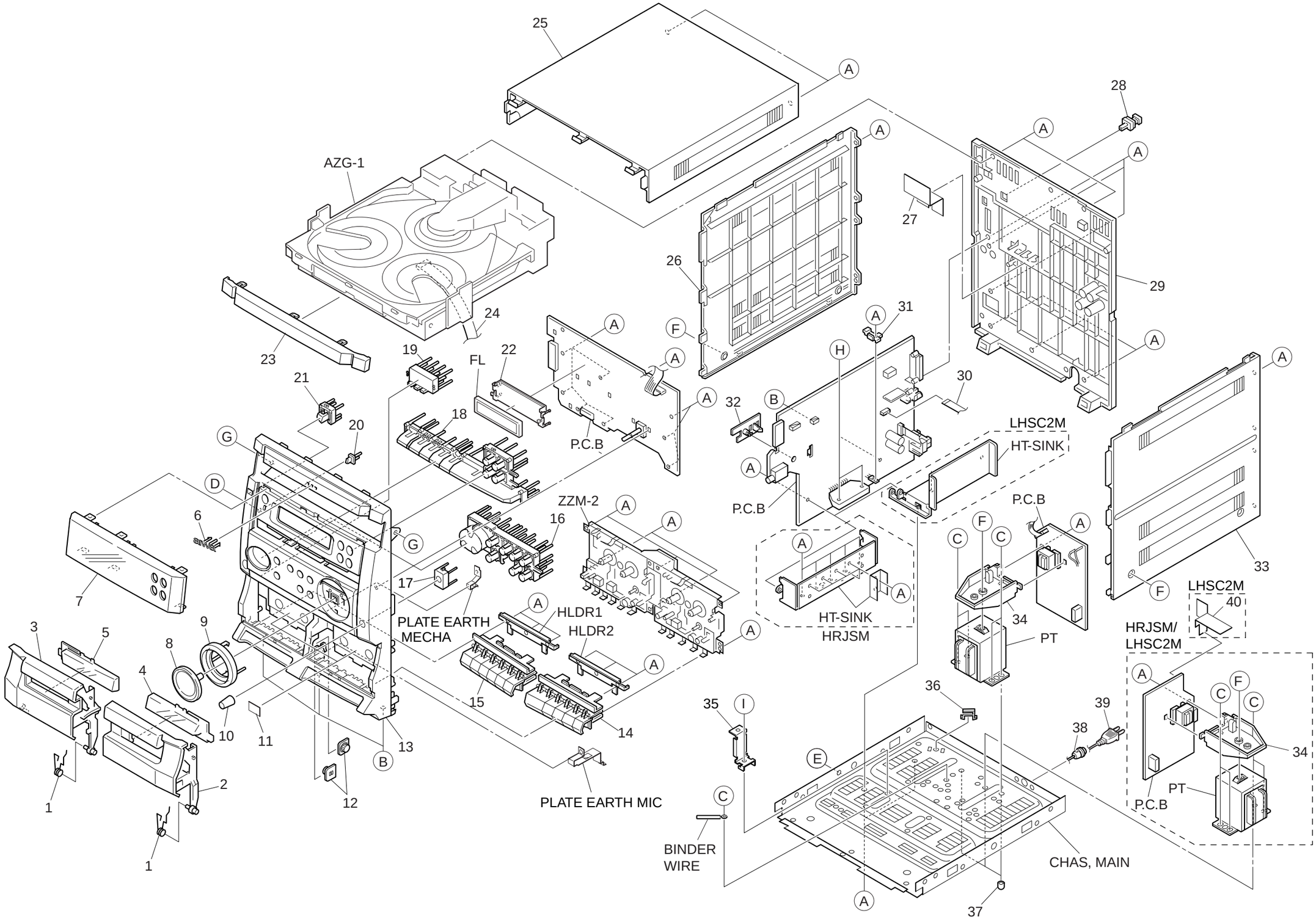
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	82-NF7-218-010		SPR-T,CASS
2	8A-NFA-004-010		BOX,CASS 2<EXCEPT 17EZBM>
2	8A-NFA-048-010		BOX,CASS 2 BLK<17EZBM>
3	8A-NFA-003-010		BOX,CASS 1<EXCEPT 17EZBM>
3	8A-NFA-047-010		BOX,CASS 1 BLK<17EZBM>
4	8A-NFA-007-010		WINDOW,CASS 2<EXCEPT 17EZBM>
4	8A-NFA-072-010		WINDOW,CASS 2 BLK<17EZBM>
5	8A-NFA-006-010		WINDOW,CASS 1<EXCEPT 17EZBM>
5	8A-NFA-071-010		WINDOW,CASS 1 BLK<17EZBM>
6	87-CE3-023-010		BADGE,AIWA 30N SILV
7	8A-NFA-054-010		WINDOW,DISP EZ SZ12<12 EZSM>
7	8A-NFA-059-010		WINDOW,DISP EZ SZ17<17EZBM>
7	8A-NFA-051-010		WINDOW,DISP H <EXCEPT 17EZBM,12 EZSM>
8	8A-NFA-011-010		KNOB,RTRY VOL<EXCEPT 17EZBM>
8	8A-NFA-055-010		KNOB,RTRY VOL BLK<17EZBM>
9	8A-NFA-012-010		RING,VOL
10	8Z-NF8-028-110		KNOB,RTRY MIC<10HR>
11	81-532-080-010		LBL,CASS-COMPT<17EZBM>
12	86-NFZ-231-010		DMPR,70
13	8A-NFA-042-010		CABI,FR EZ<12 EZSM>
13	8A-NFA-044-010		CABI,FR EZ BLK<17EZBM>
13	8A-NFA-041-010		CABI,FR H<10HR>
13	8A-NFA-001-010		CABI,FR U<10KSM,10EZSM,11LHSC>
14	8A-NFA-014-010		KEY,CASS 2P<EXCEPT 17EZBM>
14	8A-NFA-020-010		KEY,CASS 2P BLK<17EZBM>
15	8A-NFA-013-010		KEY,CASS 1<EXCEPT 17EZBM>
15	8A-NFA-019-010		KEY,CASS 1 BLK<17EZBM>
16	8A-NFA-010-010		KEY,OPE<EXCEPT 17EZBM>
16	8A-NFA-057-010		KEY,OPE BLK<17EZBM>
17	8A-NF9-021-010		PLATE,MIC<10HR>
18	8A-NFA-009-010		KEY,FUN<EXCEPT 17EZBM>
18	8A-NFA-056-010		KEY,FUN BLK<17EZBM>
19	8A-NFA-016-010		KEY,RDS<12 EZSM>
20	8A-NFA-018-010		REFLECTOR,ECO
21	8A-NFA-008-010		KEY,POWER
22	8A-NFA-208-010		GUIDE,FL 100-25 ANFA
23	8A-NFA-049-010		PANEL,TRAY BLK<17EZBM>
23	8A-NFA-002-010		PANEL,TRAY H<EXCEPT 17EZBM>
24	88-913-221-110		FF-CABLE, 13P 1.25 220MM
25	8A-NFA-062-010		PANEL,TOP V-2<EXCEPT 17EZBM>
25	8A-NFA-064-010		PANEL,TOP V-2 B<17EZBM>
26	8A-NFA-063-010		PANEL,LEFT V-2<EXCEPT 17EZBM>
26	8Z-NFA-035-110		PANEL,LEFT V-2 B<17EZBM>
27	8A-NFA-215-010		PLATE,PL HR<10HR>
28	84-ZG1-245-210		CAP,OPTICAL
29	8A-NFA-029-010		CABI,REAR EZBM SZ17<17EZBM>
29	8A-NFA-024-010		CABI,REAR EZSM<10EZSM>
29	8A-NFA-025-010		CABI,REAR EZSM SZ12<12 EZSM>
29	8A-NFA-022-010		CABI,REAR HRJSM<10HR>
29	8A-NFA-026-010		CABI,REAR KSM<10KSM>
29	8A-NFA-030-010		CABI,REAR LH W/O SPEC<11LHSC>
30	88-906-251-110		FF-CABLE,6P 1.25
31	8A-NF8-205-010		HLDR,IC<11LHSC>
32	8A-NFA-214-010		HLDR,PWB M ANFA<11LHSC>
33	8A-NFA-065-010		PANEL,RIGHT V-2<10HR,11LHSC>
33	8A-NFA-068-010		PANEL,RIGHT V-2 B PL<17EZBM>
33	8A-NFA-067-010		PANEL,RIGHT V-2 PL <10KSM,10EZSM,12 EZSM>
34	8A-NF9-211-010		HLDR,PWB PT HI
35	88-NF9-213-010		HLDR,PWB MAIN<EXCEPT 11LHSC>
36	87-NF4-221-010		HLDR,CABLE<EXCEPT 11LHSC>
37	8Z-NB8-240-010		COVER, PL
⚠ 38	87-085-185-010		BUSHING, AC CORD (E)
⚠ 39	87-A80-157-010		AC CORD ASSY,E BLK CC
40	8A-NFA-212-010		PLATE,PL LH<11LHSC>
A	87-067-703-010		TAPPING SCREW, BVT2+3-10
B	87-NF4-224-010		S-SCREW,IT3B+3-8 CU
C	87-078-191-010		S-SCREW,IT+4-10
D	87-723-096-410		QT2+3-10W/O SLOT BL<11LHSC>
E	87-721-096-410		QT2+3-10 GLD<11LHSC>
F	87-067-641-010		UTT2+3-8(W/O SLOT)BL
G	87-721-097-410		QT2+3-12 GLD
H	87-067-581-010		TAPPING SCREW, BVT2+3-15<11LHSC>
I	87-067-688-010		BVTT+3-6

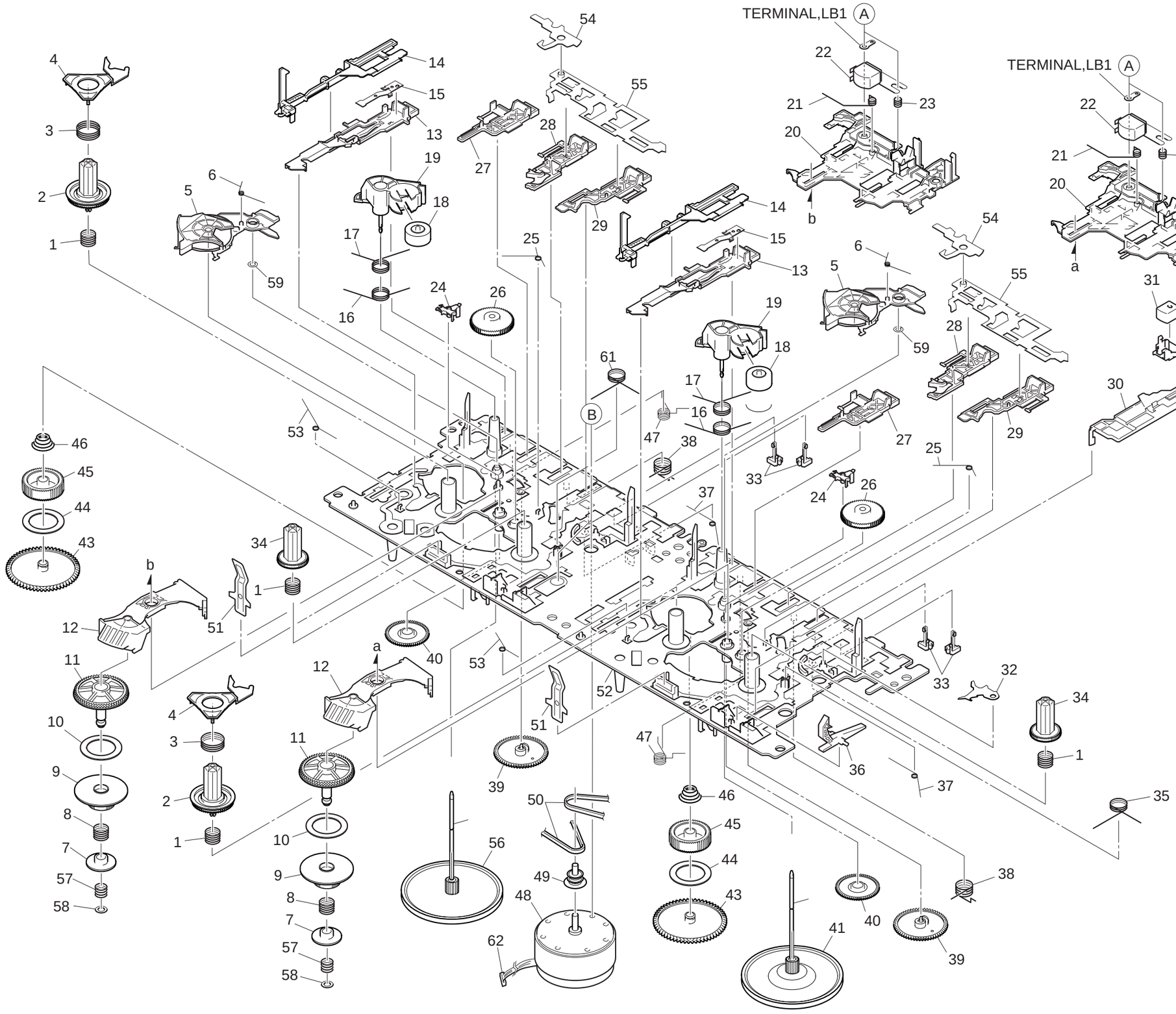
COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

MECHANICAL EXPLODED VIEW 1/1



TAPE MECHANISM EXPLODED VIEW 1/1 (ZZM-2 PR1NM/PR1NO/YPR1NM)



TAPE MECHANISM PARTS LIST 1/1 (ZZM-2 PR1NM/PR1NO/YPR1NM)

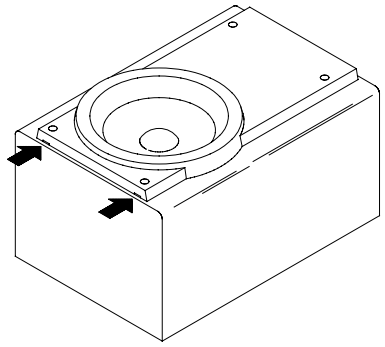
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-ZM1-254-210		SPR-C,REEL R
2	8Z-ZM1-225-110		GEAR,REEL R
3	8Z-ZM1-253-110		SPR-C,AUTO SENSOR
4	8Z-ZM1-217-110		LEVER,AUTO SENSOR
5	8Z-ZM1-212-110		LEVER,T-UP
6	8Z-ZM1-245-010		SPR-T,AUTO
7	8Z-ZM1-236-010		CLR,SLIP FF/REW
8	8Z-ZM1-252-010		SPR-C,FF/REW
9	8Z-ZM1-230-010		GEAR,SLIP FF/REW A
10	8Z-ZM1-269-010		FELT,FF/REW 2
11	8Z-ZM1-238-110		GEAR,SLIP FF/REW B 2
12	8Z-ZM1-237-010		LEVER,FF/REW 2
13	8Z-ZM1-209-210		LEVER,PAUSE
14	8Z-ZM1-218-110		LEVER,E-LOCK H
15	8Z-ZM1-256-010		SPR-P,PAUSE
16	8Z-ZM1-244-010		SPR-T,T-UP
17	8Z-ZM1-247-210		SPR-T,PINCH
18	8Z-ZM1-261-110		ROLLER ASSY,PINCH
19	8Z-ZM1-221-010		LEVER,PINCH
20	8Z-ZM1-205-210		LEVER,PLAY
21	8Z-ZM1-248-110		SPR-T,BRG
22	87-A90-403-110		HEAD,RPH MS15R
23	84-ZM2-227-310		SPR-C,AZIMUTH
24	8Z-ZM1-216-010		LEVER,AUTO
25	8Z-ZM1-246-010		SPR-T,AUTO 2
26	8Z-ZM2-214-010		GEAR,IDL REW ZZM-2
27	8Z-ZM2-212-010		LEVER,STOP ZZM-2
28	8Z-ZM1-207-010		LEVER,FF
29	8Z-ZM1-206-010		LEVER,REW
30	8Z-ZM1-210-010		LEVER,REC
31	87-A90-404-010		HEAD,EH LE15B
32	8Z-ZM2-218-010		LEVER,REC LOCK ZZM-2
33	87-A91-492-010		SW,LEAF MSW18560
34	8Z-ZM1-226-010		GEAR,REEL L
35	8Z-ZM1-241-010		SPR-T,PLAY
36	8Z-ZM1-220-110		LEVER,REC SENSOR
37	8Z-ZM1-249-010		SPR-T,FR
38	8Z-ZM1-242-110		SPR-T,FF/REW
39	8Z-ZM1-229-010		GEAR,CAM
40	8Z-ZM1-232-010		GEAR,IDL FF/REW
41	8Z-ZM1-290-010		FLY-WHL ASSY,ZZM-1
43	8Z-ZM1-228-010		GEAR,SLIP T-UP B
44	8Z-ZM1-265-010		FELT,T-UP
45	8Z-ZM1-227-010		GEAR,SLIP T-UP A
46	8Z-ZM1-251-110		SPR-C,T-UP SLIP
47	8Z-ZM1-243-210		SPR-T,STOP/PAUSE
48	87-A91-532-010		MOT,MS15U2LW1A
49	8Z-ZM1-235-010		PULLEY,MOT
50	8Z-ZM2-216-010		BELT,MAIN M
51	8Z-ZM1-260-010		SPR-P,CASETTE
52	8Z-ZM2-201-010		CHAS ASSY,ZZM-2
53	8Z-ZM1-255-110		SPR-T,E-LOCK
54	8Z-ZM2-219-010		LEVER,E-OPEN ZZM-2
55	8Z-ZM1-214-110		LEVER,LOCK
56	8Z-ZM2-230-010		FLY-WHL ASSY,ZZM-2
57	8Z-ZM1-257-110		SPR-C,F/R
58	8Z-ZM1-275-010		W-L,1.47-4-0.25
59	80-ZM6-243-010		SH 1.75-3.6-0.5 SLT
60	87-A91-494-010		SW,LEAF MSW17820
61	8Z-ZM1-241-010		SPR-T,PLAY
62	8Z-ZM2-601-010		CONN ASSY,9P ZZM-2
A	84-ZM2-242-010		S-SCREW,AZ1-2-6.4
B	8Z-ZM2-220-110		V+2.6 ZZM-2

SPEAKER DISASSEMBLY INSTRUCTIONS

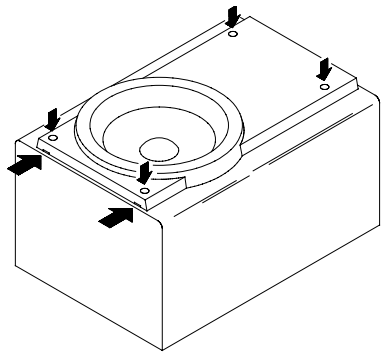
Type.1

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.



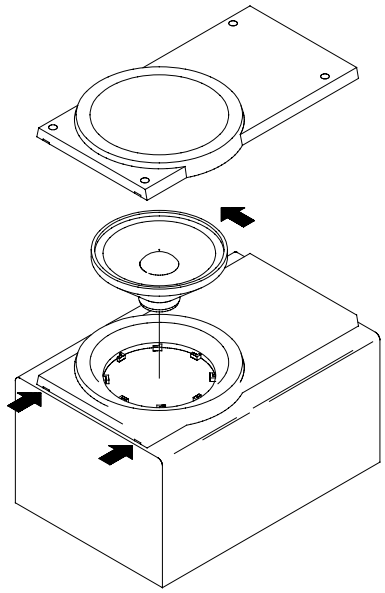
Type.2

Remove the grill frame and four pieces of rubber caps by pulling out with a flat-bladed screwdriver. Remove the screws from hole where installed rubber caps. Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Remove the screws of each speaker unit and then remove the speaker units.

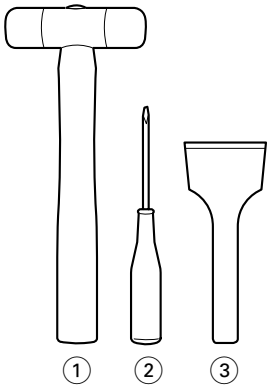


Type.3

Insert a flat-bladed screwdriver into the position indicated by the arrows and remove the panel. Turn the speaker unit to counterclockwise direction while inserting a flat-bladed screwdriver into one of the hollows around speaker unit, and then remove the speaker unit. After replacing the speaker unit, install it turning to clockwise direction until "click" sound comes out.



Type.4



TOOLS

① Plastic head hammer
② (⊖) flat head screwdriver
③ Cut chisel

How to Remove the PANEL, FR

1. Insert the (⊖) flat head screwdriver tip into the gap between the PANEL, FR and the PANEL, SPKR. Tap the head of the (⊖) flat head screwdriver with the plastic hammer head, and create the clearance as shown in Fig-1.

2. Insert the cut chisel in the clearance, and tap the head of the cut chisel with plastic hammer as shown in Fig-2, to remove the PANEL, FR.

3. Place the speaker horizontally. Tap head of the cut chisel with plastic hammer as shown in Fig-3, and remove the PANEL, FR completely.

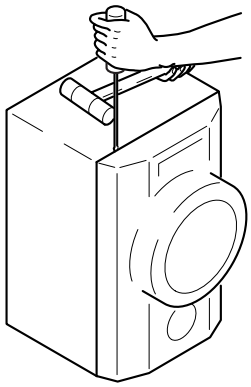


Fig-1

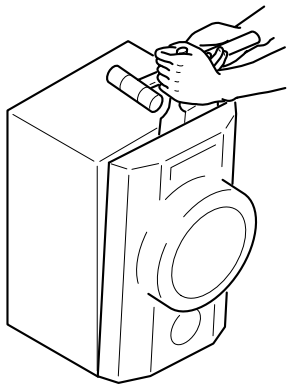


Fig-2

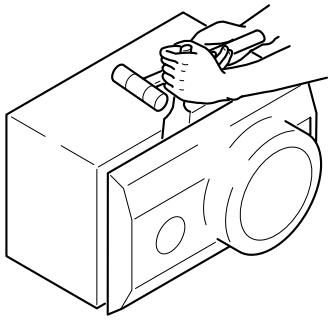


Fig-3

How to Attach the PANEL, FR

Attach the PANEL, FR to the PANEL, SPKR. Tap the four corners of the PANEL, FR with the plastic hammer to fit the PANEL, FR into the PANEL, SPKR completely.

SPEAKER PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NSL-001-010		PANEL,FR<EXCEPT 10YB>
1	8A-NSL-012-010		PANEL,FR B<10YB>
2	8A-NSL-003-010		GRILLE,FRAME ASSY
3	8A-NSL-606-010		SPKR, W 120<10YS,10YB,12Y1S,12YS>
3	8A-NSL-604-010		SPKR, W 120<12YJ3S,12YJSC1>
3	8Z-NSL-603-010		SPKR, W 120<12YJSL,12YJSC>
3	8A-NSL-602-010		SPKR,120<15YLSC>
4	8A-NSL-017-010		CORD,SPKR <12Y1S,12YS,12YJ3S,15YLSC>
4	87-NS7-611-010		CORD,SPKR <EXCEPT 12Y1S,12YS,12YJ3S>
5	8Z-NSY-003-010		CORD,BUSH<15YLSC>

ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	8A-NFA-906-010		IB,EZ(9L)M PDF <10EZ,17EZ>
1	8A-NFA-916-010		IB,EZ(9L)M -SZ12(RDS) PDF <12EZ>
1	8A-NFA-901-110		IB,H(ECA)M<10HR>
1	8A-NFA-905-010		IB,K(E)M PDF <10K>
1	8A-NFA-929-010		IB,LH(P)CE -SZ10J<11LHSC2>
⚠ 2	87-A91-017-010		PLUG,CONVERSION JT-0476<10HR>
3	8Z-NF9-701-210		RC UNIT,ZAS02<EXCEPT 17EZ>
3	8Z-NF9-703-110		RC UNIT,ZAS17<17EZ>
4	87-006-225-010		AM LOOP ANT NC2<EXCEPT 10HR>
4	87-006-226-010		AM-LOOPANT C0<10HR>
5	87-043-115-010		ANT,FEEDER FM<10HR,11LHSC2>
6	87-A90-118-010		ANT,WIRE FM (Z) <10EZ,12EZ,17EZ,10K>
7	87-A90-119-010		ANT,WIRE SW(5M)<10HR>

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
AIWA CO.,LTD. 2–11, IKENOHATA 1–CHOME, TAITO-KU, TOKYO 110, JAPAN TEL:03 (3827) 3111

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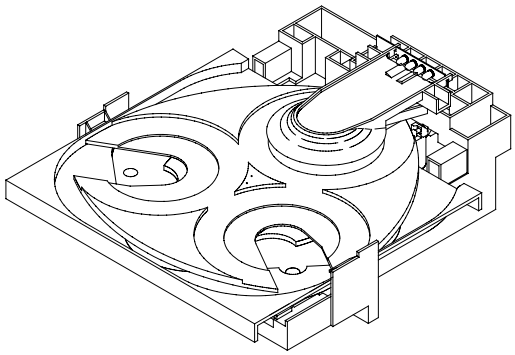
English



SERVICE MANUAL

CD-R/RW MECHANISM

BASIC CD MECHANISM:KSM-880CAB

TYPE
ZD8RD
YZD8RMDJM
ZD8RMDJM
ZD8RDNDM
YKZD8RDF
ZD8RDM
YZD8RDM
ZD8RN1DM
YZD8RDJM

aiwa

S/M Code No. 09-001-335-3N6

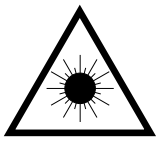
DATA

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynling laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

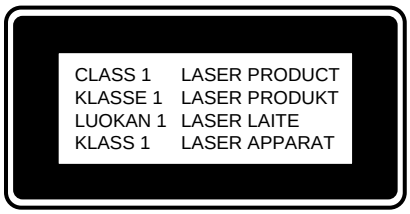
ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

ADVARSEL!

Usynlig laserståling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

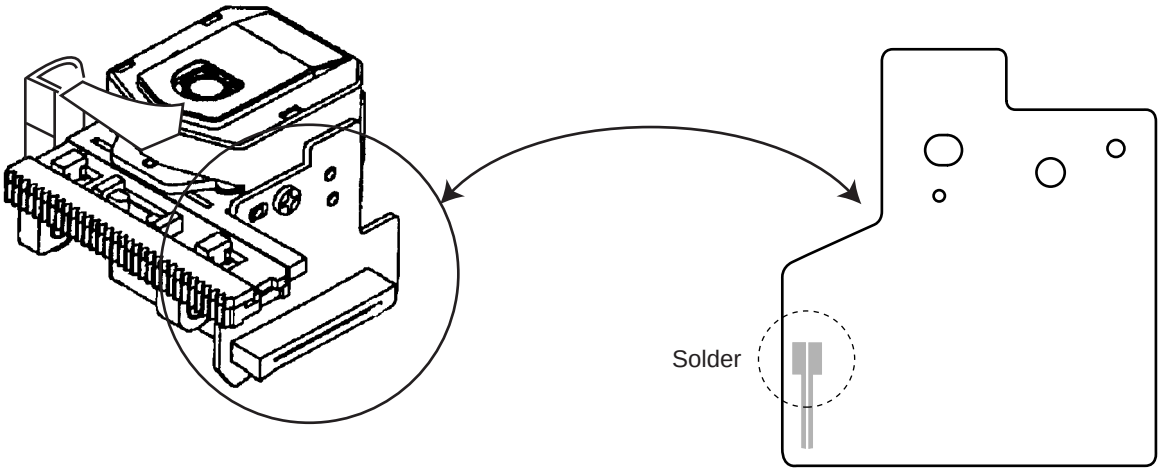
This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



Precaution to replace Optical block

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

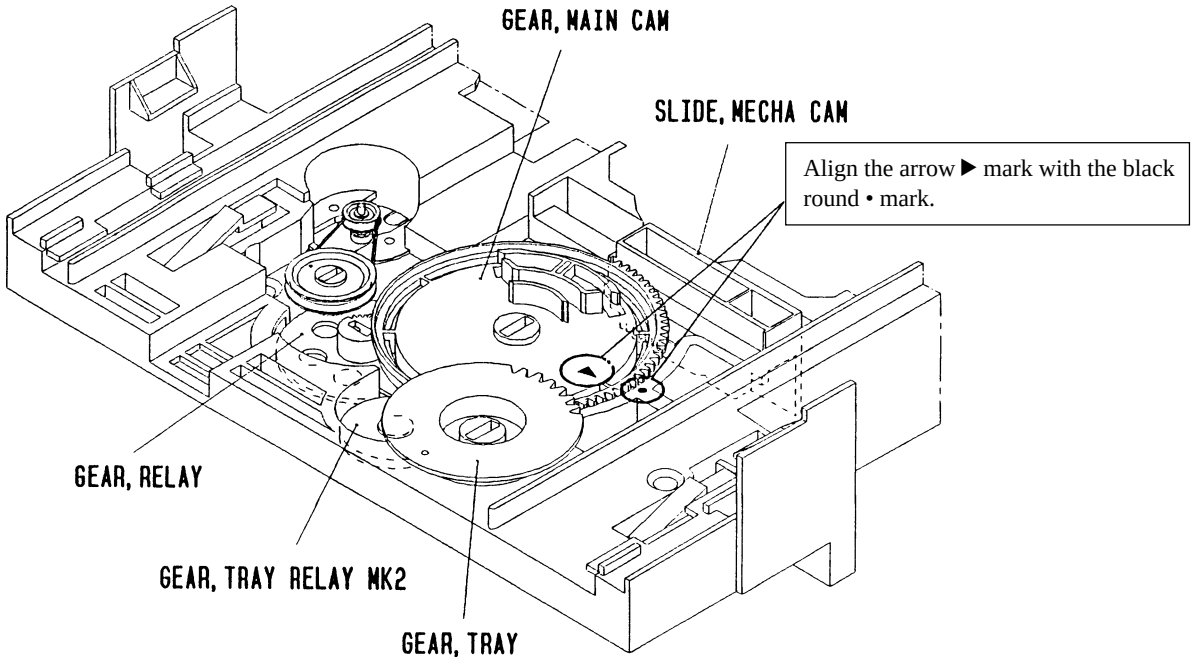
1) After the connection, remove solder shown in the figure below.



How to Adjust the Rotating Phase of the Gear, Main Cam

1) Push down the hooking catch of the CHAS. MECH, and remove the TRAY.
2) Align the arrow mark of the Gear, Main Cam with the black round mark of the CHAS, MECHA as shown below.
3) Confirm that the Slide, Mech Cam is located in the right position, then insert the TRAY gently.

Caution: If the rotating phase of the Gear, Main Cam is incorrectly adjusted, the chucking operation and tray movement will have malfunction.



ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

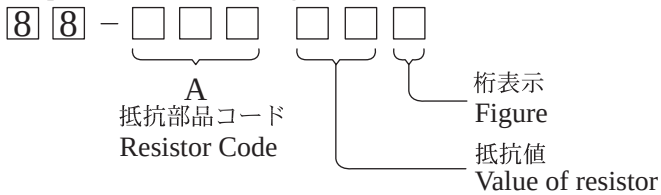
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-381-040		C-IC,LA9235M
	87-A21-556-010		C-IC,LC78641E
	87-A21-414-010		IC,BA5927S
TRANSISTOR			
	87-026-609-080		TR,KTA1266GR
	87-A30-076-080		C-TR,2SC3052F
	87-A30-497-080		TR,2SA1980Y/G
	87-A30-087-080		C-FET,2SK2158
	87-026-237-080		CHIP-TR,DTC124XK <EXCEPT ZD8RN1DM,YZD8RDM>
	87-A30-075-080		C-TR,2SA1235F
DIODE			
	87-A40-270-080		C-DIODE,MC2838
	87-070-136-080		ZENER,MTZJ5.1B
	87-A40-003-080		ZENER,MTZJ4.3A
	87-A40-337-080		ZENER,MTZJ6.8B
	87-A40-313-080		C-DIODE,MC2840
3CD C.B			
C1	87-010-374-080		CAP,E 47-10
C2	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C2	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C3	87-010-260-080		CAP, ELECT 47-25V
C4	87-010-260-080		CAP, ELECT 47-25V
C5	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C5	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C6	87-010-405-080		CAP, ELECT 10-50V
C7	87-010-263-080		CAP, ELECT 100-10V
C8	87-012-349-080		C-CAP,S 1000P-50 CH
C10	87-010-546-080		CAP,E 0.33-50
C11	87-010-401-080		CAP, ELECT 1-50V
C13	87-010-321-020		C-CAP,S 82P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C13	87-010-321-080		C-CAP,S 82P-50 J CH <YKZD88RDF,ZD8RD>
C15	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C15	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C16	87-010-260-080		CAP, ELECT 47-25V
C101	87-010-992-080		C-CAP,S 0.047-25 B
C102	87-010-401-080		CAP, ELECT 1-50V
C103	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C103	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C104	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C104	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C105	87-010-260-080		CAP, ELECT 47-25V
C106	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C106	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C107	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C107	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C108	87-010-186-080		CAP,CHIP 4700P<YKZD88RDF,ZD8RD>
C108	87-010-186-020		CAP,CHIP 4700P <EXCEPT YKZD88RDF,ZD8RD>
C109	87-010-992-080		C-CAP,S 0.047-25 B
C110	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C110	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C111	87-010-260-080		CAP, ELECT 47-25V
C112	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C112	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C114	87-010-260-080		CAP, ELECT 47-25V
C115	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C115	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C116	87-010-260-080		CAP, ELECT 47-25V
C117	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C117	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C118	87-010-260-080		CAP, ELECT 47-25V
C119	87-015-819-080		
C120	87-010-312-080		C-CAP,S 15P-50 CH <YKZD88RDF,ZD8RD>
C120	87-010-312-020		C-CAP,S 15P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C121	87-010-312-020		C-CAP,S 15P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C121	87-010-312-080		C-CAP,S 15P-50 CH <YKZD88RDF,ZD8RD>
C122	87-010-404-080		CAP, ELECT 4.7-50V
C123	87-010-197-020		CHIP CAPACITOR,0.01-25 <EXCEPT YKZD88RDF,ZD8RD>
C123	87-010-197-080		CHIP CAPACITOR,0.01-25 <YKZD88RDF,ZD8RD>
C124	87-010-401-080		CAP, ELECT 1-50V
C126	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C126	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C128	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C128	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C130	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C130	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C132	87-010-405-080		CAP, ELECT 10-50V
C133	87-010-314-020		C-CAP,S 22P-50V <EXCEPT YKZD88RDF,ZD8RD>
C133	87-010-314-080		C-CAP,S 22P-50V<YKZD88RDF,ZD8RD>
C135	87-A11-088-080		CAP,TC U 100P-50 J CH
C151	87-010-405-080		CAP, ELECT 10-50V
C152	87-010-405-080		CAP, ELECT 10-50V
C192	87-012-349-080		C-CAP,S 1000P-50 CH
C193	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C193	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C201	87-A10-730-080		CAP,E 1000-16 SMG
C202	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C202	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C204	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C204	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C205	87-010-405-080		CAP, ELECT 10-50V
C206	87-010-405-080		CAP, ELECT 10-50V
C207	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
C207	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C301	87-010-382-080		CAP, ELECT 22-25V
C302	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C302	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C303	87-010-260-080		CAP, ELECT 47-25V
C401	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C401	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C402	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C402	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C403	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C403	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C404	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C404	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C405	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C405	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C406	87-010-322-020		C-CAP,S 100P-50 CH <EXCEPT YKZD88RDF,ZD8RD>
C406	87-010-322-080		C-CAP,S 100P-50 CH <YKZD88RDF,ZD8RD>
C407	87-010-405-080		CAP, ELECT 10-50V
C454	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
C454	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C601	87-010-260-080		CAP, ELECT 47-25V
C602	87-010-196-080		CHIP CAPACITOR,0.1-25 <YKZD88RDF,ZD8RD>
C602	87-010-196-020		CHIP CAPACITOR,0.1-25 <EXCEPT YKZD88RDF,ZD8RD>
CN1	87-A60-429-010		CONN,16P H TOC-A
CN201	84-ZG1-648-010		CONN ASSY,6P
CN202	87-A60-130-010		CONN,5P V
CN501	84-ZG1-647-010		CONN ASSY,2P <EXCEPT ZD8RN1DM,ZD8RNDM>
CN601	87-009-345-010		CONN,2P PH V <EXCEPT ZD8RN1DM,ZD8RDM,YZD8RDM,ZD8RNDM>
CON401	87-099-030-010		CONN,13P 6216H
FB601	87-008-372-080		FLTR,EMI BL01 RN1 <EXCEPT ZD8RN1DM,ZD8RDM,YZD8RDM,ZD8RNDM>
FB602	87-008-372-080		FLTR,EMI BL01 RN1
LED601	87-A40-558-010		LED,SLZ-8128A-01-A
M201	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
SW201	87-036-109-010		SW,MICRO SPPB61
SW202	87-036-109-010		SW,MICRO SPPB61
X101	87-A70-046-010		VIB,XTAL 16.934MHZ
LED. C.B			
LED501	87-A40-263-080		LED,SLH-56PCT31 GRN <EXCEPT ZD8RN1DM,ZD8RNDM>
LED502	87-A40-263-080		LED,SLH-56PCT31 GRN <EXCEPT ZD8RN1DM,ZD8RNDM>
LED503	87-A40-268-080		LED,SLH-56DCT31 ORN <EXCEPT ZD8RN1DM,ZD8RNDM>
LED504	87-A40-268-080		LED,SLH-56DCT31 ORN <EXCEPT ZD8RN1DM,ZD8RNDM>
T-T C.B			
C401	87-018-214-080		CAP TC U 0.1-50F
CON401	86-NFZ-675-010		CONN,5P H 6216-11H
M401	87-045-364-010		MOTOR(BCH3B14)
PS401	87-026-573-010		SNSR,PHOTO GP1S53V
MOTOR C.B			
PIN3	91-564-722-110		CONN,PIN 6P
SW1	91-572-085-110		LEAF SWITCH

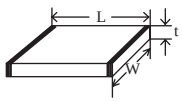
- Regarding connectors, they are not stocked as they are not the initial order items.
  The connectors are available after they are supplied from connector manufacturers upon the order is received.

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

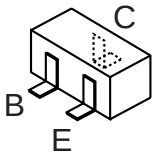
チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

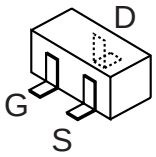
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

TRANSISTOR ILLUSTRATION

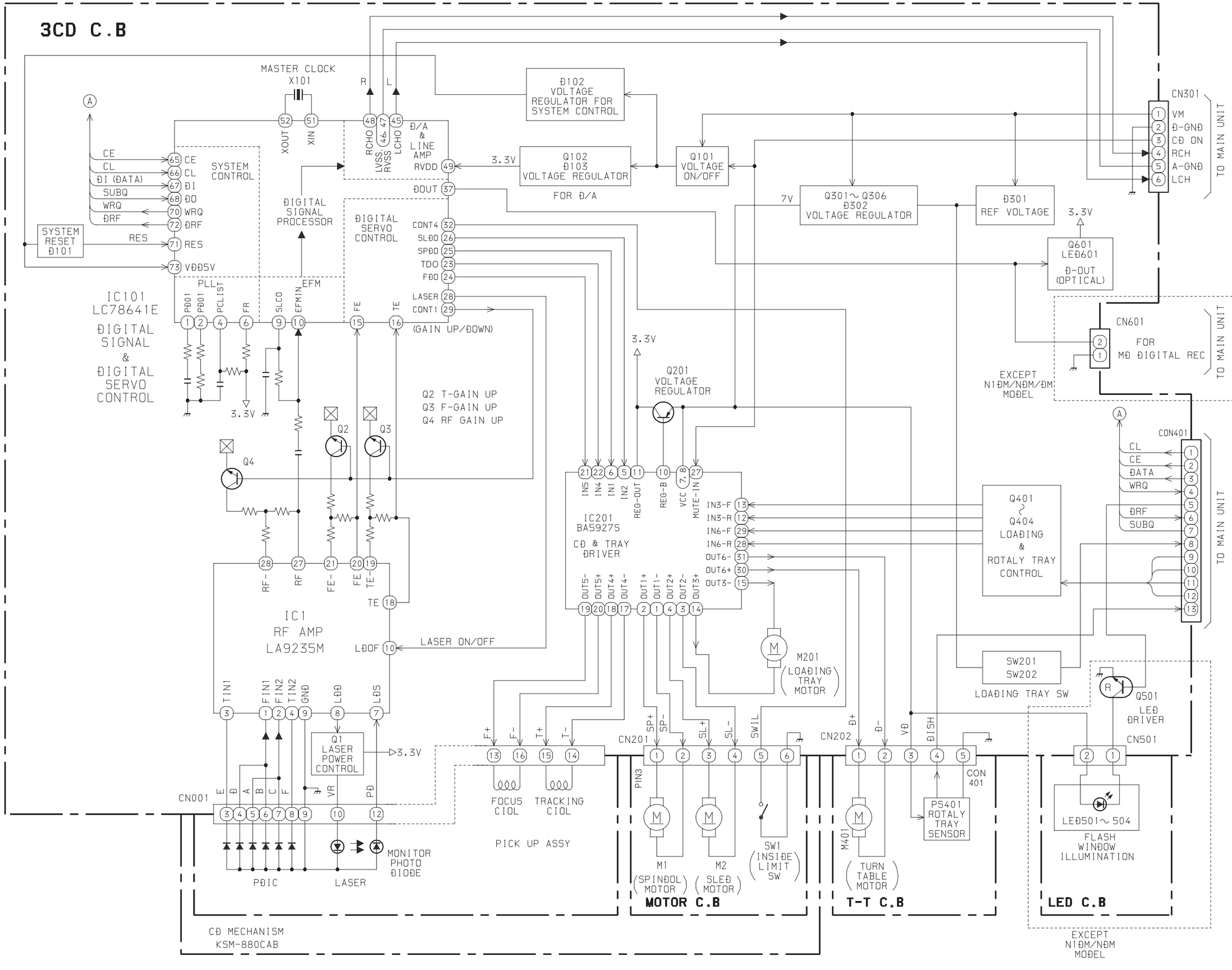


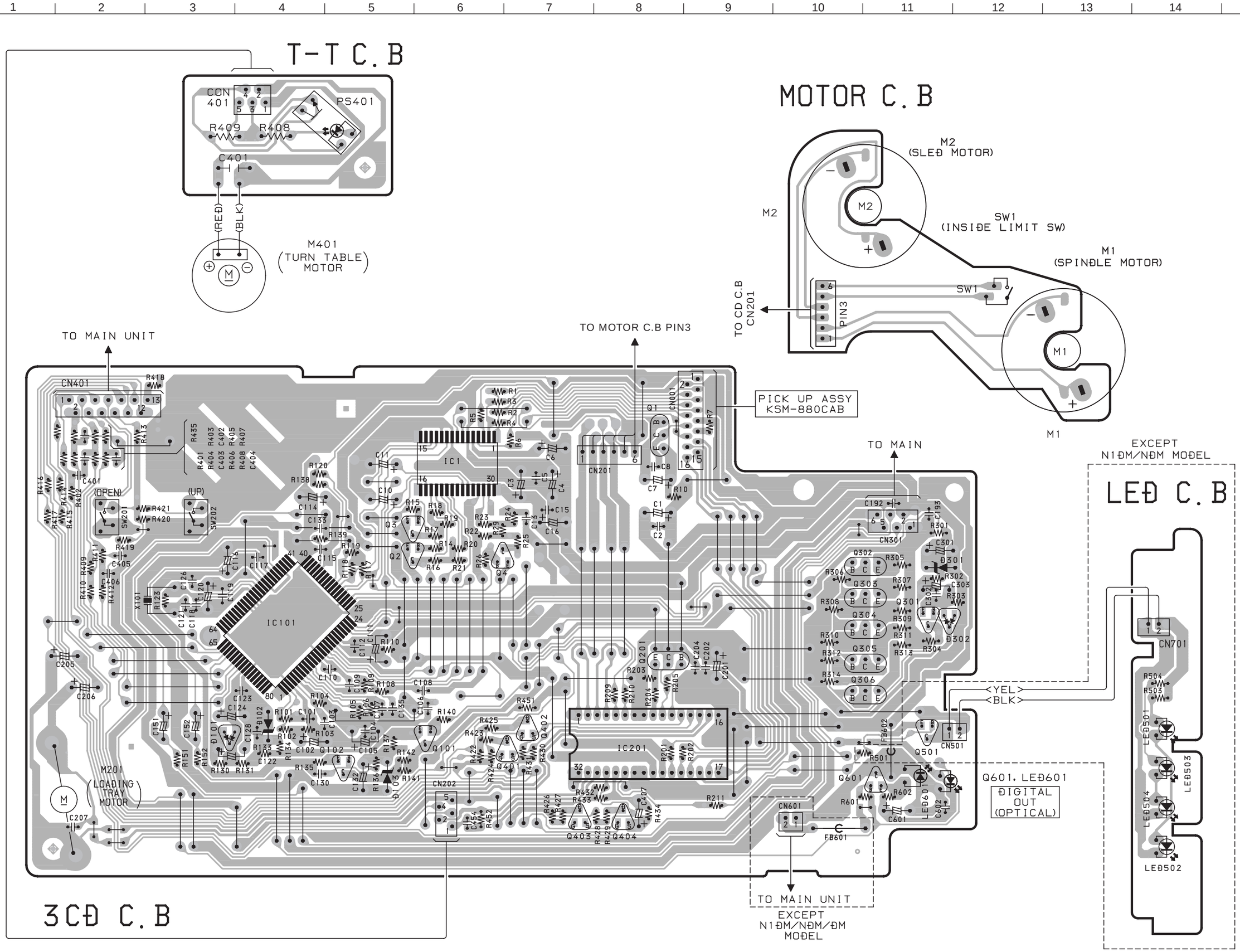
2SA1235F
2SC3052F
DTC124XK

2SA1980Y/G
KTA1266GR

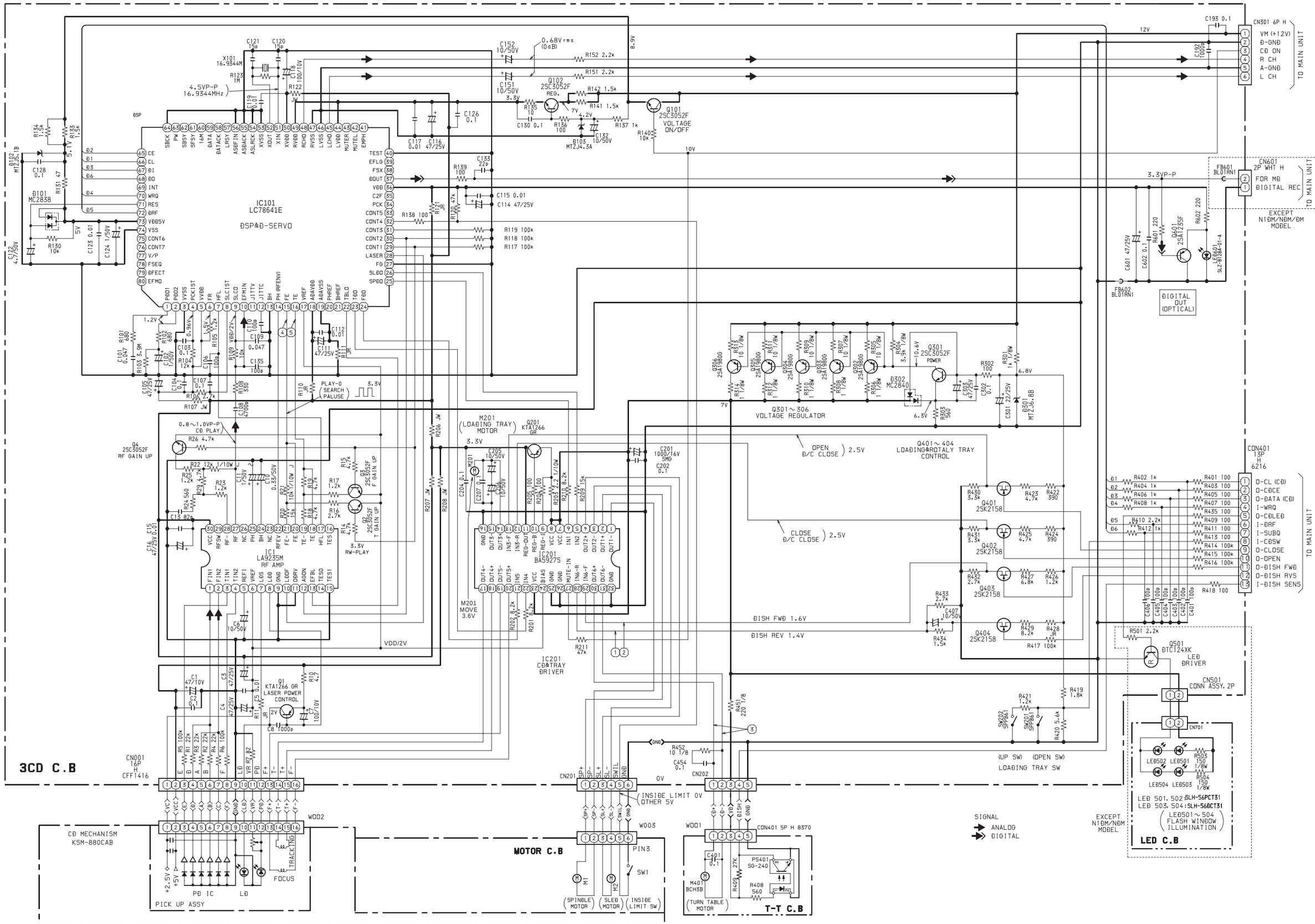


2SK2158


3CD C.B
MASTER CLOCK
X101
XOUT
XIN
R
L
RCHO
LVSS
RVSS
LCHO
Đ/A & LINE AMP
Đ102 VOLTAGE REGULATOR FOR SYSTEM CONTROL
Q102 Đ103 VOLTAGE REGULATOR
FOR Đ/A
Q101 VOLTAGE ON/OFF
3.3V
RVDD
ĐOUT
CE
CL
Đ I (ĐATA)
SUBQ
WRQ
ĐRF
RES
VĐĐ5V
SYSTEM CONTROL
SYSTEM RESET Đ101
ĐIGITAL SIGNAL PROCESSOR
ĐIGITAL SERVO CONTROL
CONT4
SLĐO
SPĐO
TDO
FĐO
LASER
CONT1
(GAIN UP/ĐOWN)
PLL
EFM
IC101
LC78641E
ĐIGITAL SIGNAL & ĐIGITAL SERVO CONTROL
PĐO1
PDO1
PCLIST
FR
SLCO
EFMIN
FE
TE
Q2 T-GAIN UP
Q3 F-GAIN UP
Q4 RF GAIN UP
Q2
Q3
Q4
Q201 VOLTAGE REGULATOR
7V
Q301~Q306 Đ302 VOLTAGE REGULATOR
Đ301 REF VOLTAGE
Q601 LEĐ601 Đ-OUT (OPTICAL)
CN301
VM
Đ-GNĐ
CĐ ON
RCH
A-GNĐ
LCH
TO MAIN UNIT
CN601
FOR MĐ ĐIGITAL REC
EXCEPT N1ĐM/NĐM/ĐM MOĐEL
CON401
CL
CE
ĐATA
WRQ
ĐRF
SUBQ
IC201
BA5927S
CĐ & TRAY ĐRIVER
IN5
IN4
IN1
IN2
REG-O
REG-B
VCC
MUTE-IN
IN3-F
IN3-R
IN6-F
IN6-R
OUT6-
OUT6+
OUT3-
OUT5-
OUT5+
OUT4+
OUT4-
OUT1+
OUT1-
OUT2+
OUT2-
OUT3+
Q401 ~ Q404 LOAĐING & ROTALY TRAY CONTROL
SW201 SW202
LOAĐING TRAY SW
M201 (LOAĐING TRAY MOTOR)
M
Q501 LEĐ ĐRIVER
CN501
LEĐ501~504
FLASH WINĐOW ILLUMINATION
LED C.B
EXCEPT N1ĐM/NĐM MOĐEL
RF-
RF
FE-
FE
TE-
TE
IC1
RF AMP
LA9235M
LĐOF
LASER ON/OFF
TIN1
FIN1
FIN2
TIN2
GND
LĐĐ
LĐS
Q1 LASER POWER CONTROL
3.3V
CN001
E
Đ
A
B
C
F
VR
PĐ
PĐIC
LASER
MONITOR PHOTO ĐIOĐE
F+
F-
T+
T-
FOCUS CIOL
TRACKING CIOL
PICK UP ASSY
CN201
SP+
SP-
SL+
SL-
SWIL
PIN3
M1 (SPINĐOL MOTOR)
M2 (SLEĐ MOTOR)
SW1 INSIĐE LIMIT SW
MOTOR C.B
CN202
Đ+
Đ-
VĐ
ĐISH
M401
TURN TABLE MOTOR
PS401 ROTALY TRAY SENSOR
CON 401
T-T C.B
CĐ MECHANISM KSM-880CAB


T-T C.B
CON 401
PS401
R409
R408
C401
(RED)
(BLK)
M401
(TURN TABLE MOTOR)
MOTOR C.B
M2
(SLED MOTOR)
M2
SW1
(INSIDE LIMIT SW)
M1
(SPINDLE MOTOR)
SW1
PIN3
TO CD C.B
CN201
M1
TO MAIN UNIT
TO MOTOR C.B PIN3
PICK UP ASSY
KSM-880CAB
TO MAIN
EXCEPT
N1DM/NDM MODEL
LED C.B
CN401
R418
(OPEN)
(UP)
SW201
SW202
M201
(LOADING TRAY MOTOR)
IC1
IC101
IC201
CN201
CN001
CN202
CN601
CN301
CN501
CN701
Q1
Q2
Q3
Q4
Q101
Q102
Q201
Q301
Q302
Q303
Q304
Q305
Q306
Q401
Q402
Q403
Q404
Q501
Q601
FB601
FB602
X101
D101
D102
D301
D302
LED501
LED502
LED503
LED504
LED601
<YEL>
<BLK>
Q601, LED601
DIGITAL OUT (OPTICAL)
TO MAIN UNIT
EXCEPT
N1DM/NDM/DM
MODEL
3CD C.B

SCHEMATIC DIAGRAM



TEST MODE

1. How to Start the CD Test Mode

While pressing the CD function key, connect the AC power plug to wall outlet.
The test mode starts up and “CD TEST” appears on the display.

2. How to Exit the CD Test Mode

Press the POWER button or disconnect the AC power plug from wall outlet.
* When any function key other than PLAY is pressed during playback, the test mode is canceled.

3. Function and Use of the CD Test Mode

NO	MODE	How to enter the mode	Display	Operation	Check item
1	Start mode		All indicators turn on	• All FL all ndicators turn on	• FL check • Microprocessor check
2	Search mode	STOP button	CD	• LD turns on all the time • Focus search continuos operation *1 • Spindle motor continuos kick	• APC circuit check • Laser current measurement • Focus search waveform check • Focus error waveform check (Ignores DRF during search mode)
3	Play mode	PLAY button	Normal	• Normal playback • Focus search is continued if failed in TOC READ.	• Each servo circuit is checked • DRF check
4	Traverse mode	PAUSE button	Normal	• Tracking servo OFF/ON Repeats OFF/ON every time the PAUSE button is pressed	• Tracking balance check
5	Sled mode	FF button	CD TEST	• Moves PU to inner circumference *2 Kicks the lens to inner circumference at the same time	• Sled circuit check • Tracking circuit check • Mechanism operation check • PU check
		RWD button	CD TEST	• Moves PU to outer circumference *2 Kicks the lens to outer circumference at the same time	
6	Spindle mode	TAPE REC button	All indicators turn on	• Pressing the button once rotates the spindle motor in the normal direction (rough speed). Pressing the button again rotates it in the reverse direction. Pressing it again stops the motor	• Spindle circuit check • Spindle motor check
7	RF AGC mode	TUNER button	AGC ON/OFF	• Repeats ON/OFF every time the TUNER button is pressed	• PU good or defective check • RF AMP circuit check

*1 ..... When the focus search keeps running for 10 minutes or longer continuously, the driver IC heats up, and the protective circuit works so that the machine may stops operating.
In this case, turn off the main power, wait for a while and restart the machine.

*2 ..... Do not keep pressing the FF or RWD button while the pickup is located at the innermost or outermost circumference because the gear can be damaged as the sled motor keeps rotating.

4. Automatic Adjustment Result Display

The automatic adjustment values of the focus and the tracking can be displayed.

4-1. Automatic Adjustment Result Display of Focus Offset Cancel/Gain

1) Enter the start mode (all indicators turn on).
2) Press the TAPE button to display “F**” and set each of the adjustment item to either ON or OFF. (Refer to the following table.)
3) Press the PLAY button to play back the CD.
4) Press the CD button.
5) The automatic adjustment value “F** **” is displayed. (Refer to the following table.)
6) Upon completion of check, press the CD button twice to return to the play mode.

Adjustment item (ON = 1, OFF = 0)			Automatic adjustment value display (Asterisk * means hexadecimal display.)			
F	OFFSET	GAIN	F	OFFSET	—	GAIN
F	0	0	F	Not displayed	Not displayed	Not displayed
F	1	1	F	**	Not displayed	**
F	1	0	F	**	Not displayed	Not displayed
F	0	1	F	Not displayed	Not displayed	**

4-2. Automatic Adjustment Result Display of Tracking Offset Cancel/Balance/Gain

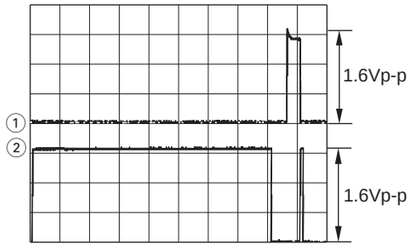
1) Enter the start mode (all indicators turn on).
2) Press the AUX button to display “T***” and set each adjustment item to either ON or OFF. (Refer to the following table.)
3) Press the PLAY button to play back the CD.
4) Press the CD button twice.
5) The automatic adjustment value “F******” is displayed. (Refer to the following table.)
6) Upon completion of check, press the CD button to return to the play mode.

Adjustment item (ON = 1, OFF = 0)				Automatic adjustment value display (Asterisk * means hexadecimal display.)			
T	OFFSET	BALANCE	GAIN	T	OFFSET	BALANCE	GAIN
T	0	0	0	T	Not displayed	Not displayed	Not displayed
T	1	1	1	T	**	**	**
T	1	1	0	T	**	**	Not displayed
T	1	0	1	T	**	Not displayed	**
T	1	0	0	T	**	Not displayed	Not displayed
T	0	1	1	T	Not displayed	**	**
T	0	1	0	T	Not displayed	**	Not displayed
T	0	0	1	T	Not displayed	Not displayed	**

WAVE FORM

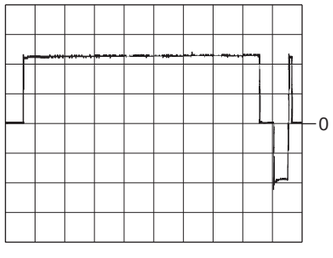
① IC201 ㉘ (IN6-R)
② IC201 ㉙ (IN6-F)

VOLT/DIV: 500mV
TIME/DIV: 200mS



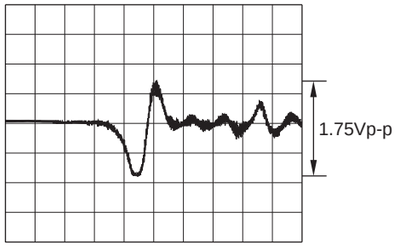
③ Between CN202 ① and ②
(② Pin: 0 Level)

VOLT/DIV: 1V
TIME/DIV: 200mS



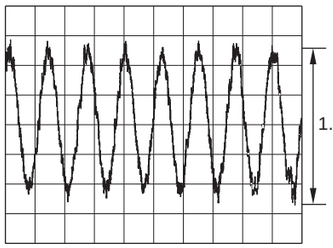
④ IC101 ⑮ (FE)

VOLT/DIV: 500mV
TIME/DIV: 2mS



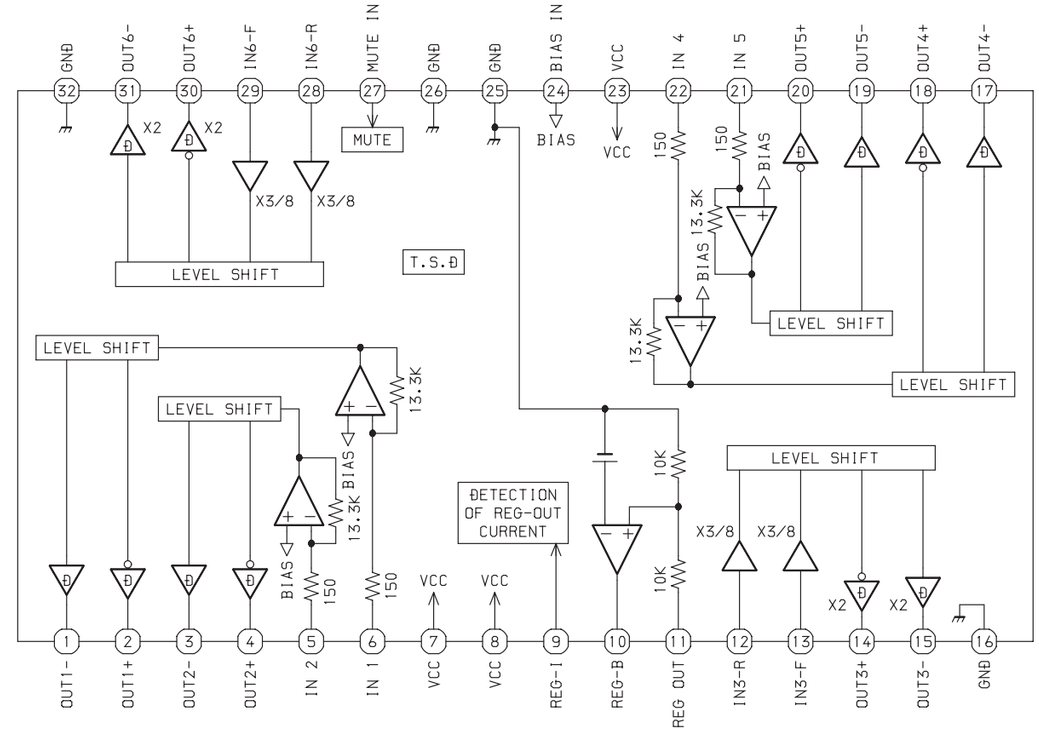
⑤ IC101 ⑯ (TE)

VOLT/DIV: 200mV
TIME/DIV: 200µS

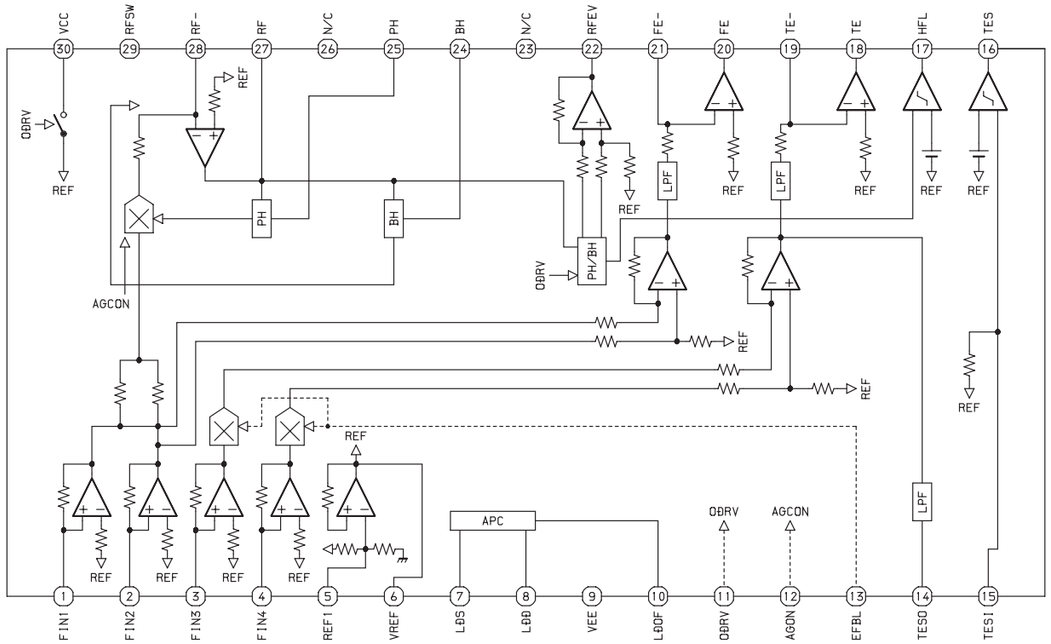


IC BLOCK DIAGRAM

IC, BA5927S



IC, LA9235M



IC DESCRIPTION

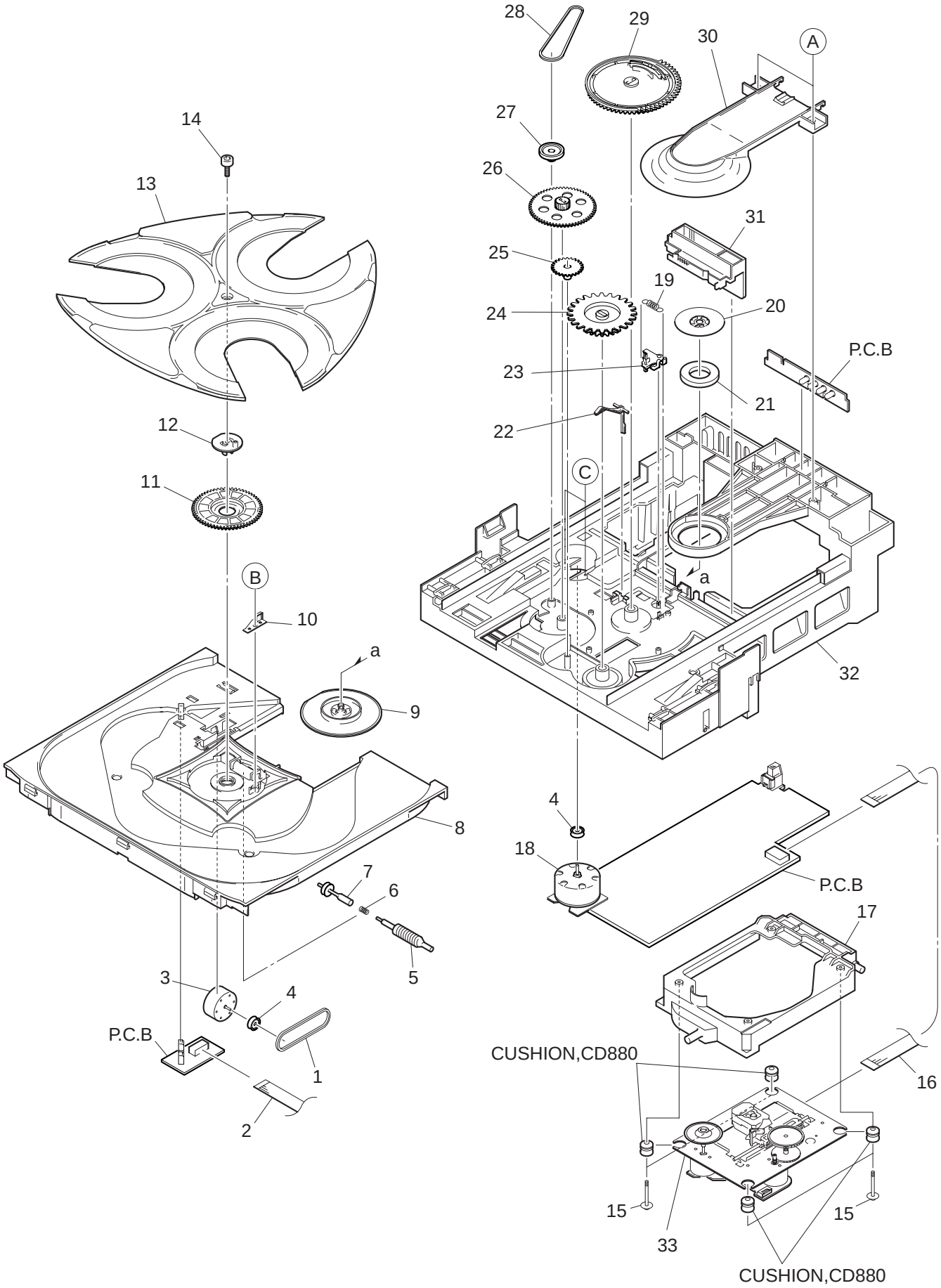
IC, LC78641E

Pin No.	Pin Name	I/O	Description
1	PDO1	O	Internal VCO control phase comparator output pin. (Pull down)
2	PDO2	O	Internal VCO control phase comparator output pin. OFF for rough servo, ON for phase servo. (Pull down)
3	VVSS	—	Internal VCO ground pin.
4	PCKIST	—	PDO output current adjustment resistor connection pin.
5	VVDD	—	Internal VCO power supply pin.
6	FR	—	VCO frequency range adjustment resistor connection pin. (Pull up)
7	HFL	I	Mirror detection signal input pin.
8	SLCIST	—	SLCO output current adjustment resistor connection pin.
9	SLCO	O	Control output.
10	EFMIN	I	EFM signal input pin.
11	JITTV	O	Jitter detection monitor pin.
12	JITTC	O	Jitter detection adjustment pin. (Pull down)
13	BH	I	BH signal input pin. (Connected to GND)
14	PH (RFENV)	I	PH signal or RFENV signal input pin.
15	FE	I	FE signal input pin.
16	TE	I	TE signal input pin.
17	VREF	I	VREF input pin.
18	ADAVDD	—	Servo A/D, D/A power supply pin.
19	ADAVSS	—	Servo A/D, D/A ground pin.
20	PHREF	O	PH reference output pin. (Not connected)
21	BHREF	O	BH reference output pin. (Not connected)
22	TBLO	O	Tracking balance output pin.
23	TDO	O	Tracking control output pin.
24	FDO	O	Focus control output pin.
25	SPDO	O	Spindle control output pin.
26	SLDO	O	Thread control output pin.
27	DVREF/FG	I/O	Output driver VREF output pin. FG signal input pin. (Connected to GND)
28	LASER	O	Laser ON/OFF control pin.
29	CONT1	I/O	General-purpose input/output pin 1. (Connected to GND)
30	CONT2	I/O	General-purpose input/output pin 2. (Connected to GND)
31	CONT3	I/O	General-purpose input/output pin 3. (Connected to GND)
32	CONT4	I/O	General-purpose input/output pin 4.
33	CONT5	I/O	General-purpose input/output pin 5. (Not connected)
34	PCK	O	EFM data playback clock monitor pin. Average 4.3218MHz when the phase is locked. (Not connected)
35	C2F	O	C2 flag output pin. (Not connected)
36	VDD	—	Digital power supply pin.
37	DOUT	O	Digital out output pin. (EIAJ format)
38	FSX	O	Output pin for the 7.35kHz synchronization signal divided from the crystal oscillator. (Not connected)

Pin No.	Pin Name	I/O	Description
39	EFLG	O	C1, C2 error correction monitor pin. (Not connected)
40	TEST	I	Test input pin. (Connected to GND)
41	EMPH	I/O	Emphasis pin. Which becomes an input pin after reset and can be controlled externally. This becomes an emphasis monitor pin under control by command. (Not connected)
42	MUTEL	O	L channel mute output pin. (Not connected)
43	MUTER	O	R channel mute output pin. (Not connected)
44	LVDD	—	L channel power supply pin.
45	LCHO	O	L channel output pin.
46	LVSS	—	L channel ground pin.
47	RVSS	—	R channel ground pin.
48	RCHO	O	R channel output pin.
49	RVDD	—	R channel power supply pin.
50	XVDD	—	Crystal oscillator power supply pin.
51	XIN	I	Connections for a 16.9344MHz crystal oscillator pin.
52	XOUT	O	
53	XVSS	—	Crystal oscillator ground pin.
54	ASLRCK	I	L/R clock input pin. (Connected to GND)
55	ASDACK	I	Bit clock input pin. (Connected to GND)
56	ASDFIN	I	L/R channel data input pin. (Connected to GND)
57	LRSY	O	L/R clock output pin. (Not connected)
58	DATACK	O	Bit clock output pin. (Not connected)
59	DATA	O	L/R channel data output pin. (Not connected)
60	16M	O	16.9344MHz output pin. (Not connected)
61	SFSY	O	Subcode frame synchronization signal output pin. This signal falls when the subcode is in the standby state. (Not connected)
62	SBSY	O	Subcode clock synchronization signal output pin. (Not connected)
63	PW	O	Subcode P, Q, R, S, T, U and W output pin. (Not connected)
64	SBCK	I	Subcode readout clock input pin. (Connected to GND)
65	CE	I	Chip enable signal input pin.
66	CL	I	Data transfer clock input pin.
67	DI	I	Data input pin.
68	DO	O	Data output pin.
69	INT	O	Interruption signal output pin. (Not connected)
70	WRQ	O	Interruption signal output pin.
71	RES	I	Reset input pin. This pin must be set low briefly after power is first applied.
72	DRF	O	Focus ON detect pin.
73	VDD5V	—	Microprocessor interface power supply.
74	VSS	—	Digital ground pin.
75	CONT6	I/O	General-purpose input/output pin 6.
76	CONT7	I/O	General-purpose input/output pin 7.
77	V/P	O	Rough servo/phase control automatic switching monitor output pin. “H” for rough servo and “L” for phase servo. (Not connected)

Pin No.	Pin Name	I/O	Description
78	FSEQ	O	Synchronization signal detection output pin. Outputs a high level when the synchronization signal detected from the EFM signal and the internally generated synchronization signal agree. (Not connected)
79	DEFECT	I/O	Defect pin. Which becomes an input pin after reset and can be controlled externally. This becomes the defect monitor pin under control by command. (Not connected)
80	EFMO	O	EFM signal output pin. (Not connected)

MECHANICAL EXPLODED VIEW 1/1



MECHANICAL PARTS LIST 1/1

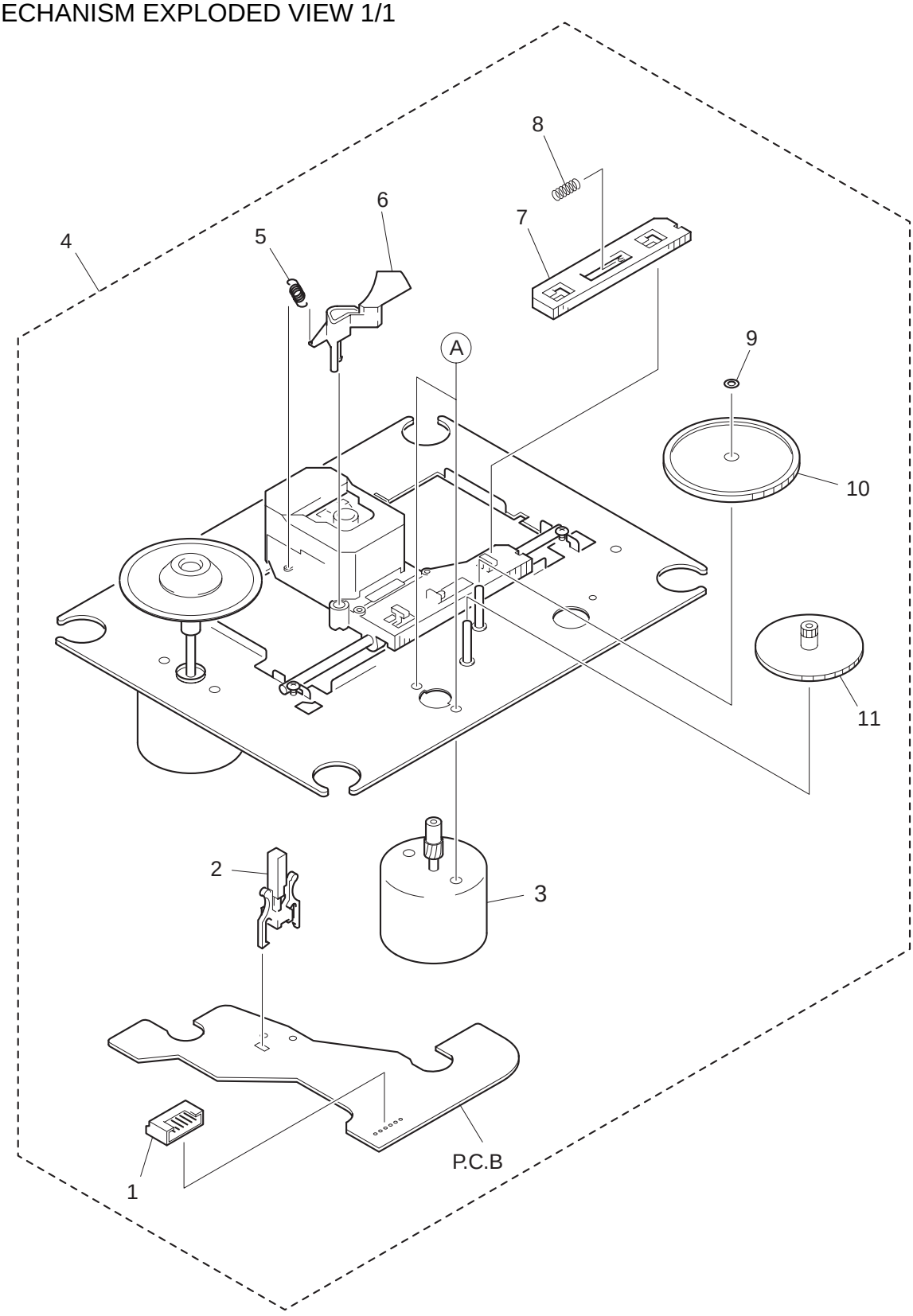
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	84-ZG1-225-010		BELT,SQ1.0-63.3
2	84-ZG1-673-010		F-CABLE,5P 1.25 210MM BLACK N <EXCEPT ZD8RN1DM,ZD8RNDM>
2	84-ZG1-672-010		F-CABLE,5P 1.25 210MM WHITE N <ZD8RN1DM,ZD8RNDM>
3	87-045-364-010		MOTOR(BCH3B14)
4	84-ZG1-267-010		PULLEY,LOAD MO 8 <EXCEPT YKZD8RDF,ZD8RD>
4	81-ZG1-212-010		PULLY,LOAD MO<YKZD8RDF,ZD8RD>
5	84-ZG1-238-010		GEAR,WORM N
6	84-ZG1-248-010		SPR-C,WORM
7	84-ZG1-239-210		PULLY,WORM N
8	84-ZG1-008-210		TRAY,NO3<ZD8RD>
8	8A-ZG1-001-010		TRAY,NO3 BLU<EXCEPT ZD8RD>
9	8A-ZG1-210-010		HLDR,MAGNET 23<YKZD8RDF>
9	84-ZG1-243-210		HLDR,MAGNET N(J) <YZD8RDJM,ZD8RMDJM,YZD8RMDJM>
9	84-ZG1-289-010		HLDR,MAGNET NAT<ZD8RNDM>
9	81-ZG1-277-310		HLDR,MAGNET N <ZD8RN1DM,ZD8RDM,YZD8RDM,ZD8RD>
10	84-ZG1-259-010		SPR-P,WORM
11	84-ZG1-221-010		GEAR,MAIN TT<YKZD8RDF>
11	84-ZG1-269-010		GEAR,MAIN TT 4<EXCEPT YKZD8RDF>
12	84-ZG1-224-010		LEVER,TT<EXCEPT ZD8RNDM>
12	84-ZG1-288-010		LEVER,TT NAT<ZD8RNDM>
13	8A-ZG1-002-010		TURN TABLE,NO1 BLU<EXCEPT ZD8RD>
13	84-ZG1-005-210		TURNTABLE,NO1(*)<ZD8RD>
14	81-ZG1-239-010		S-SCREW,TT
15	8A-ZG1-201-010		S-SCREW,MECH 880
16	85-NFT-611-110		FF-CABLE 16P-1.0
17	84-ZG1-299-210		HLDR,MECHA NO3<EXCEPT ZD8RNDM>
17	8A-ZG1-203-010		HLDR,MECHA NO3 NAT<ZD8RNDM>
18	87-045-305-010		MOTOR, RF-500TB DC-5V (2MA)
19	84-ZG1-211-010		SPR-E CAM S
20	84-ZG1-285-010		PLATE,MAGNET BLK<ZD8RN1DM>
20	81-ZG1-255-110		PLATE,MAGNET MK2<EXCEPT ZD8RN1DM>
21	83-ZG3-604-010		RING,MAG 2
22	83-ZG3-213-010		LVR,SW
23	84-ZG1-208-210		LEVER,CAM<YKZD8RDF>
23	84-ZG1-266-010		LEVER,CAN 8<EXCEPT YKZD8RDF>
24	84-ZG1-205-210		GEAR,TRAY (*)
25	81-ZG1-291-110		GEAR,TRAY RELAY NO3
26	84-ZG1-206-110		GEAR,RELAY<YKZD8RDF>
26	84-ZG1-274-010		GEAR,RELAY 8<EXCEPT YKZD8RDF>
27	84-ZG1-207-010		PULLEY,RELAY
28	84-ZG1-209-010		BELT,SQ1.8-117.7
29	84-ZG1-203-410		GEAR,MAIN CAM<ZD8RNDM>
29	84-ZG1-215-410		GEAR,MAIN CAM BLU<EXCEPT ZD8RNDM>
30	84-ZG1-011-010		REFLECTOR,CD <EXCEPT ZD8RN1DM,ZD8RNDM>
31	84-ZG1-216-310		SLIDE,MECHA CAM YEL <EXCEPT ZD8RNDM>
31	84-ZG1-204-310		SLIDER,MECHA CAM<ZD8RNDM>
32	84-ZG1-286-010		CHAS,MECHA NAT<ZD8RNDM>
32	84-ZG1-201-410		CHAS,MECHA<EXCEPT ZD8RNDM>
33	M8-ZZK-C90-070		KSM-880CAB
A	87-067-703-010		TAPPING SCREW, BVT2+3-10 <EXCEPT ZD8RN1DM,ZD8RNDM>
B	87-067-981-010		BVT2+3-6 BLK
C	87-251-070-410		U+2.6-3

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

CD MECHANISM EXPLODED VIEW 1/1



CD MECHANISM PARTS LIST 1/1

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	91-564-722-110		CONN,PIN 6P
2	91-572-085-110		LEAF SWITCH
3	9X-264-655-010		SL MOTORR ASSY
4	M8-ZZK-C90-070		KSM-880CAB
5	92-647-416-020		SPRING EXTENSION
6	92-647-595-020		SHUTTER B
7	92-647-732-010		NS SLIDE RACK
8	92-647-742-010		SPRING COMPRESSION
9	93-321-813-110		POLI WASHER
10	92-647-407-010		GEAR A
11	92-647-408-020		GEAR B
A	93-713-786-510		SCREW,+P2-3

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

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